



MODEL G0453/G0454 15" & 20" MOBILE PLANERS OWNER'S MANUAL



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
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(FOR MODELS MANUFACTURED SINCE 3/08) #TR7246 PRINTED IN CHINA



WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.

		MODEL GXXXX MACHINE NAME	
SPECIFICATIONS		⚠ WARNING!	
Motor:		Manufacture Date of Your Machine When this machine: operation, is and respirator. sted/setup and suit before starting. 4. make sure the motor has stopped and disconnect power before adjustments, maintenance, or service. 5. DO NOT expose to rain or dampness. 6. DO NOT modify this machine in any way. 7. DO NOT remove safety guards. 8. Never leave machine running unattended. 9. DO NOT operate under the influence of drugs or alcohol. 10. Maintain machine carefully to prevent accidents.	
Specification:			
Specification:			
Specification:			
Weight:			
	Date		
	Serial Number		
Manufactured for Grizzly in Taiwan			

For your convenience, we post all available manuals and manual updates for free on our website at **www.grizzly.com**. Any updates to your model of machine will be reflected in these documents as soon as they are complete.

Contact Info

We stand behind our machines. If you have any questions or need help, use the information below to contact us. Before contacting, please get the serial number and manufacture date of your machine. This will help us help you faster.

Grizzly Technical Support
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Machine Description

The Model G0453/G0454 Planer is designed to remove material in precise increments from the surface of natural wood fiber stock to make the workpiece flat.

Once the depth of cut is set, the workpiece is placed on the table and moved into the infeed roller, which pulls the workpiece under the rotating cutterhead where the material is removed. After the workpiece is completely free from the outfeed roller, the depth of cut is increased and the workpiece is passed through the planer again. This process continues until the workpiece is flat and of the correct thickness.



Identification

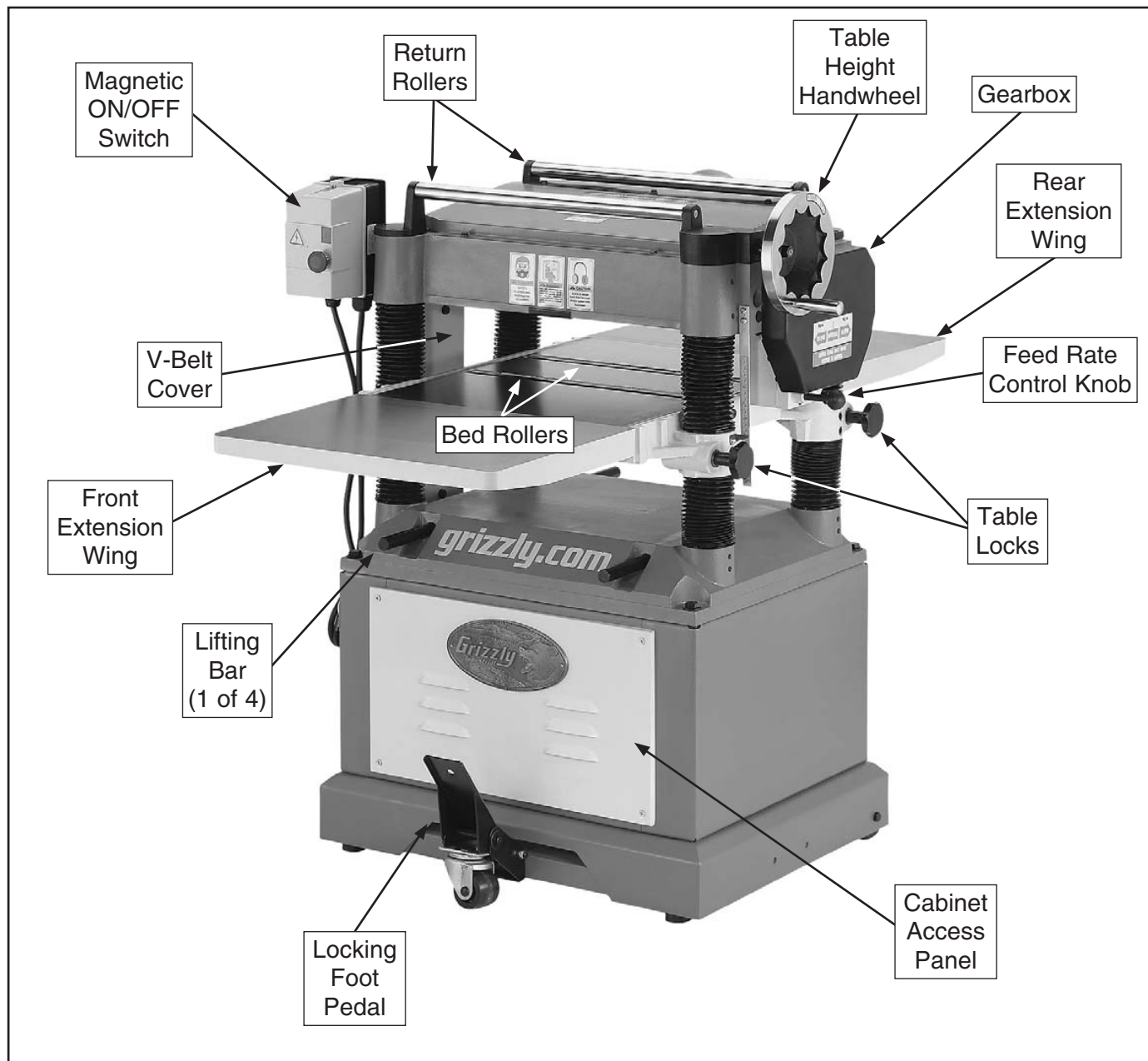


Figure 1. General identification.



Internal Components

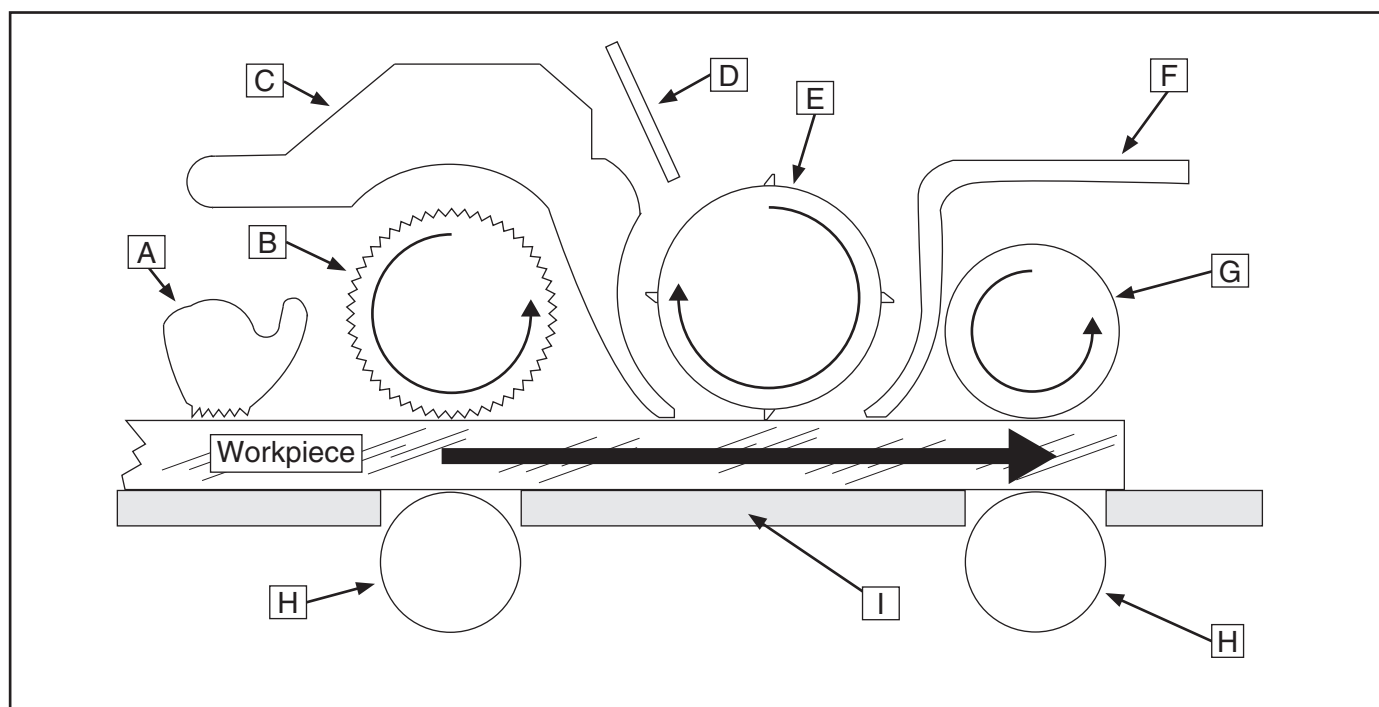


Figure 2. Workpiece path and major planing components (side cutaway view).

- A. Anti-Kickback Fingers:** Provide additional safety for the operator.
- B. Serrated Infeed Roller:** Pulls the workpiece toward the cutterhead.
- C. Chip Breaker:** Breaks off chips created by the cutterhead to prevent tear out and diverts the chips to the dust port.
- D. Chip Deflector:** Directs chips into the dust hood.
- E. Cutterhead:** Holds the knives that remove material from the workpiece.
- F. Pressure Bar:** Stabilizes the workpiece as it leaves the cutterhead and assists in deflecting wood particles toward the dust hood (G0454 only).
- G. Outfeed Rollers:** Pulls the workpiece through the planer.
- H. Table Rollers:** Provide upward pressure on the workpiece enabling the feed rollers to pull the workpiece along.
- I. Planer Table:** Provides a smooth and level path for the workpiece as it moves through the planer.

WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G0453 15" PLANER

Product Dimensions:

Weight..... 655 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 32-1/2 x 42 x 45-7/8 in.
Footprint (Length x Width)..... 22-1/2 x 22 in.

Shipping Dimensions:

Type..... Wood Crate
Content..... Machine
Weight..... 675 lbs.
Length x Width x Height..... 31 x 30 x 47 in.

Electrical:

Power Requirement..... 220V, Single-Phase, 60 Hz
Minimum Circuit Size..... 20 Amp
Switch..... Magnetic with Thermal Overload Protector
Switch Voltage..... 220V
Cord Length..... 5 ft.
Cord Gauge..... 12 gauge
Plug Included..... No
Recommended Plug/Outlet Type..... NEMA 6-20

Motors:

Main

Type..... TEFC Capacitor Start Induction
Horsepower..... 3 HP
Voltage..... 220V
Phase..... Single
Amps..... 15A
Speed..... 3450 RPM
Cycle..... 60 Hz
Number of Speeds..... 1
Power Transfer Triple V-Belt Drive
Bearings..... Sealed and Lubricated

Main Specifications:

Operation Info

Max. Cut Width..... 15 in.
Min. Stock Length..... 8 in.
Min. Stock Thickness..... 3/16 in.
Max. Stock Thickness..... 8 in.
No. of Cuts Per Inch..... 63 at 16 FPM, 42 at 30 FPM
No. of Cuts Per Minute..... 15,000
Cutterhead Speed..... 5000 RPM
Planing Feed Rate..... 16, 30 FPM
Max. Cut Depth Planing Full Width..... 3/32 in.
Max. Cut Depth Planing 6 Inch Wide Board..... 1/8 in.



Cutterhead Info

Cutterhead Type.....	3 Knife
Cutterhead Dia.....	3 in.
No. of Knives.....	3
Knife Type.....	HSS
Knife Size Length.....	15 in.
Knife Size Width.....	1 in.
Knife Size Thickness.....	1/8 in.
Knife Adjustment.....	Jack Screws

Table Info

Table Movement.....	8 in.
Table Bed Size Length.....	20 in.
Table Bed Size Width.....	15 in.
Table Bed Size Thickness.....	1-3/4 in.
No. of Bed Rollers.....	2
Floor To Table Height.....	27 — 35 in.
Roller Ext Table Size Length.....	42 in.
Roller Ext Table Size Width.....	15 in.
Roller Ext Table Size Thickness.....	1-3/4 in.

Construction

Table.....	Precision Ground Cast Iron
Body.....	Cast Iron
Stand.....	Formed Steel
Cutterhead Assembly.....	Steel
Infeed Roller.....	Solid Serrated Steel
Outfeed Roller.....	Solid Serrated Steel
Paint.....	Powder Coated

Other

Table Locks.....	Two Positive
Measurement Scale.....	Inch and Metric
No. of Dust Ports.....	1
Dust Port Size.....	4 in.

Other Specifications:

Country Of Origin	China
Warranty	1 Year
Serial Number Location	ID Label on Upper Cover
Assembly Time	30 minutes

Features:

Inch and Metric Measurement Scale
Two Adjustable Bed Rollers
Chip Breaker and Pressure Bar
Knife Setting Jig Included
Board Return Rollers
Built-in Mobile Base
Cast Iron Extension Wings
Four Column Support with Table Locks
Two Speed Automatic Board Feed





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G0454 20" PLANER

Product Dimensions:

Weight..... 890 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 39-1/2 x 55-1/2 x 45-7/8 in.
Footprint (Length x Width)..... 29-1/2 x 23-1/2 in.

Shipping Dimensions:

Type..... Wood Crate
Content..... Machine
Weight..... 920 lbs.
Length x Width x Height..... 39 x 30 x 49 in.

Electrical:

Minimum Circuit Size..... 30 amp
Switch..... Magnetic with Thermal Overload Protector
Switch Voltage..... 220V
Cord Length..... 6-1/2 ft.
Cord Gauge..... 12 gauge
Plug Included..... No
Recommended Plug/Outlet Type..... L6-30

Motors:

Main

Type..... TEFC Capacitor Start Induction
Horsepower..... 5 HP
Voltage..... 220V
Phase..... Single
Amps..... 25A
Speed..... 3450 RPM
Cycle..... 60 Hz
Number of Speeds..... 1
Power Transfer Triple V-Belt Drive
Bearings..... Sealed and Lubricated

Main Specifications:

Operation Info

Max. Cut Width..... 20 in.
Min. Stock Length..... 7-1/2 in.
Min. Stock Thickness..... 3/16 in.
Max. Stock Thickness..... 8 in.
No. of Cuts Per Inch..... 104, 83
No. of Cuts Per Minute..... 20,000
Cutterhead Speed..... 5000 RPM
Planing Feed Rate..... 16, 20 FPM
Max. Cut Depth Planing Full Width..... 1/8 in.
Max. Cut Depth Planing 6 Inch Wide Board..... 1/8 in.



Cutterhead Info

Cutterhead Type.....	4 Knife
Cutterhead Dia.....	3-1/8 in.
No. of Knives.....	4
Knife Type.....	HSS
Knife Size Length.....	20 in.
Knife Size Width.....	1 in.
Knife Size Thickness.....	1/8 in.
Knife Adjustment.....	Jack Screws and Springs

Table Info

Table Movement.....	8 in.
Table Bed Size Length.....	25-3/4 in.
Table Bed Size Width.....	20 in.
Table Bed Size Thickness.....	1-3/4 in.
No. of Bed Rollers.....	2
Floor To Table Height.....	26-1/2 - 34-1/2 in.
Roller Ext Table Size Length.....	55-1/2 in.
Roller Ext Table Size Width.....	20 in.
Roller Ext Table Size Thickness.....	1-3/4 in.

Construction

Table.....	Precision Ground Cast Iron
Body.....	Cast Iron
Stand.....	Formed Steel
Cutterhead Assembly.....	Steel
Infeed Roller.....	Solid Serrated Steel
Outfeed Roller.....	Solid Serrated Steel
Paint.....	Powder Coated

Other

Table Locks.....	Two Positive
Measurement Scale.....	Inch and Metric
No. of Dust Ports.....	1
Dust Port Size.....	5 in.

Other Specifications:

Country Of Origin	China
Warranty	1 Year
Serial Number Location	ID Label on Upper Cover
Assembly Time	30 minutes
Sound Rating	80 dB

Features:

Inch and Metric Measurement Scale
Two Adjustable Bed Rollers
Chip Breaker and Pressure Bar
Knife Setting Jig Included
Board Return Rollers
Built-in Mobile Base
Cast Iron Extension Wings
Four Column Support with Table Locks
Two Speed Automatic Board Feed



SECTION 1: SAFETY

WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

WARNING

Safety Instructions for Machinery

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine. Untrained users can be seriously hurt.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of work-piece control.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

MENTAL ALERTNESS. Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.



WARNING

DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in wet or rainy locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and well-lighted to minimize risk of injury.

ONLY USE AS INTENDED. Only use machine for its intended purpose. Never modify or alter machine for a purpose not intended by the manufacturer or serious injury may result!

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

CHILDREN & BYSTANDERS. Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

REMOVE ADJUSTING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

GUARDS & COVERS. Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

NEVER STAND ON MACHINE. Serious injury or accidental contact with cutting tool may occur if machine is tipped. Machine may be damaged.

STABLE MACHINE. Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

UNATTENDED OPERATION. Never leave machine running while unattended. Turn machine **OFF** and ensure all moving parts completely stop before walking away.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. An improperly maintained machine may increase the risk of serious injury.

CHECK DAMAGED PARTS. Regularly inspect machine for damaged parts, loose bolts, mis-adjusted or mis-aligned parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or mis-adjusted parts before operating machine.

EXPERIENCING DIFFICULTIES. If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.



WARNING

Additional Safety Instructions for Planers

OWNER'S MANUAL. This machine presents significant safety hazards to untrained users. Read and understand this entire manual before starting the planer.

KICKBACK. Be familiar with kickback. Kickback happens when the workpiece is thrown towards the operator at a high rate of speed. Until you have a clear understanding of kickback and how it occurs, DO NOT operate this planer!

REACHING INSIDE PLANER. To avoid serious personal injury from spinning knives, never remove guards or reach inside the planer while it is connected to power.

DULL/DAMAGED KNIVES. Only use sharp, undamaged knives. Kickback may occur and the cutting results will be poor if the planer is operated with dull or damaged knives.

BODY PLACEMENT. To avoid getting hit if a kickback occurs, always stand to one side of the planer during the entire operation.

PLANING CORRECT MATERIAL. Only plane natural wood stock with this planer. DO NOT plane MDF, plywood, laminates or other synthetic materials that can break up inside the planer and cause injury hazards.

GRAIN DIRECTION. Planing across the grain is hard on the planer and may cause kickback. Always plane in the same direction or at a slight angle with the wood grain.

LOOKING INSIDE PLANER. Wood chips fly around inside the planer at a high rate of speed during operation. To avoid injury from flying material, DO NOT look inside the planer during operation.

CUTTING LIMITATIONS. To reduce the risk of kickback hazards or damage to the machine, always operate within the published capacities found in the Data Sheet (beginning on Page 5) for this planer.

CLEAN STOCK. Planing stock with nails, staples, or loose knots may cause debris to be thrown at the operator at a high rate of speed and will damage the cutterhead knives. To avoid these hazards, always thoroughly inspect and prepare the workpieces.

CLEARING JAMS. To avoid serious personal injury from the spinning cutterhead, always stop the planer and disconnect it from power before removing jammed workpieces.

INFEED ROLLER CLEARANCE. The infeed roller is designed to pull material into the spinning cutterhead. To avoid serious personal injury, always keep hands, clothing, jewelry, and long hair away from the infeed roller during operation.

DISCONNECT BEFORE ADJUSTMENTS. To avoid unexpected start-up and serious personal injury, always disconnect the planer from power before performing adjustments, maintenance, or service.

CAUTION

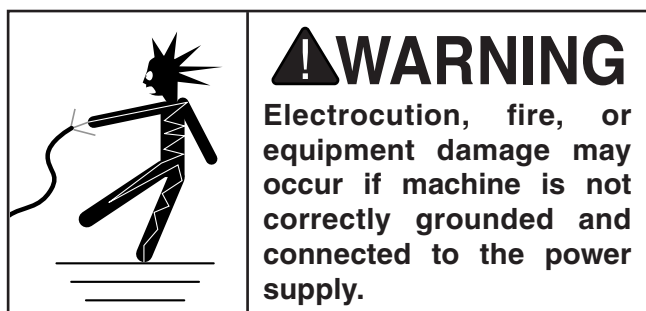
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by a qualified electrician in accordance with all applicable codes and standards.



Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

**G0453 Full-Load
Current Rating at 220V 15 Amps**

**G0454 Full-Load
Current Rating at 220V 25 Amps**

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the requirements in the following section.

G0453 220V Circuit Requirements

This machine is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

**Nominal Voltage 220V/240V
Cycle 60 Hz
Phase 1-Phase
Circuit Rating 20 Amps
Plug/Receptacle NEMA 6-20
Cord 3-Wire, 12 AWG, 300VAC, “S”-Type**

G0454 220V Circuit Requirements

This machine is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

**Nominal Voltage 220V/240V
Cycle 60 Hz
Phase 1-Phase
Circuit Rating 30 Amps
Plug/Receptacle NEMA L6-30
Cord 3-Wire, 12 AWG, 300VAC, “S”-Type**

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

CAUTION

For your own safety and protection of property, consult a qualified electrician if you are unsure about wiring practices or electrical codes in your area.

Note: *The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult a qualified electrician to ensure that the circuit is properly sized for safe operation.*



Grounding Instructions

This machine **MUST** be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

The plug specified under "Circuit Requirements" on the previous page has a grounding prong that must be attached to the equipment-grounding wire on the included power cord. The plug must only be inserted into a matching receptacle (see the following figures) that is properly installed and grounded in accordance with all local codes and ordinances.

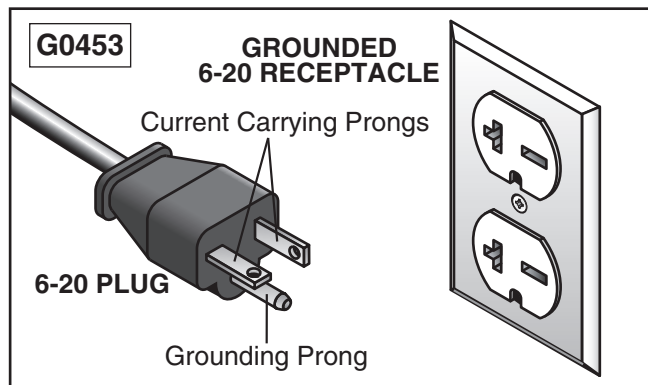


Figure 3. Typical 6-20 plug and receptacle.

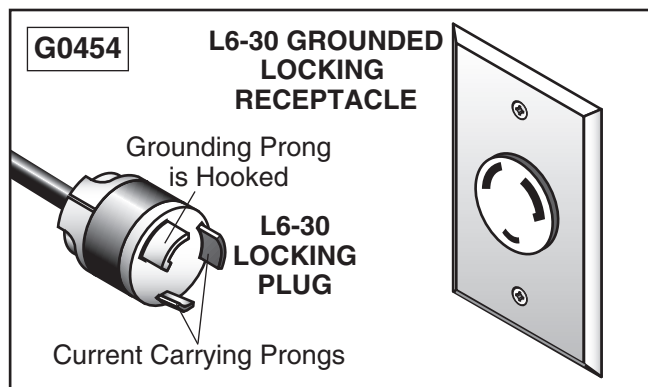


Figure 4. Typical L6-30 plug and receptacle.

NOTICE

No adapter is available or should be used with this machine. If the machine must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after reconnection, the machine must comply with all local codes and ordinances.

! WARNING

Serious injury could occur if you connect the machine to power before completing the setup process. DO NOT connect to power until instructed later in this manual.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

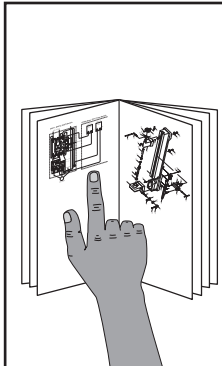
Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

G0453 Minimum Gauge Size 12 AWG
G0454 Minimum Gauge Size 10 AWG
Maximum Length (Shorter is Better).....50 ft.

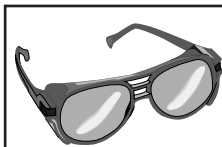


SECTION 3: SETUP



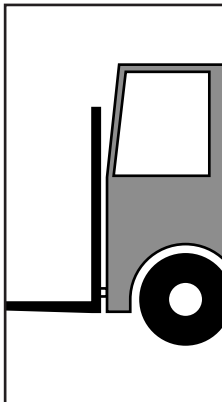
!WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



!WARNING

Wear safety glasses during the entire setup process!



!WARNING

The Model G0453/G0454 is a heavy machine. Serious personal injury may occur if safe moving methods are not used. To be safe, get assistance and use power equipment to move the shipping crate and remove the machine from the crate.

Needed for Setup

The following are needed to complete the setup process, but are not included with your machine:

Description

Qty

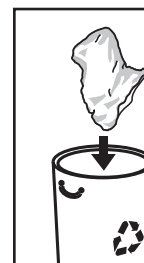
- Assistant..... 1
- Safety Glasses 1 Per Person
- Forklift (rated for at least 1000 lbs.)..... 1
- Shop Rags & Cleaning Solvent.. As Needed
- Floor Mounting Hardware..... As Needed
- Straightedge 4' 1
- Dust Collection System 1
- 4" or 5" Dust Hose w/Clamps..... 1

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



!WARNING

SUFFOCATION HAZARD!

Keep children and pets away from plastic bags or packing materials unpacked with this machine. Discard immediately.



Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

Box Inventory: (Figure 5)		Qty
A.	Planer (Not Shown)	1
B.	Dust Hood	1
C.	Foot Pedal	1
D.	Handwheel	1
E.	Caster	1
F.	Extension Wings	2

G0453 Hardware and Tools (not shown)

- Set Screws M8-1.25 x 20 (Wings)..... 4
- Hex Bolts M8-1.25 x 30 (Wings)..... 6
- Flat Washers 8mm (Wings)..... 6
- Lock Washers 8mm (Wings) 6
- Handwheel Bushing 1
- Handwheel Handle 1
- Hex Nut M12-1.75 (Handwheel)..... 1
- Flat Washer 12mm (Handwheel)..... 1
- Hex Bolts M6-1 x 10 (Dust Hood) 3
- Flat Washers 6mm (Dust Hood)..... 6
- Hex Nuts M6-1 (Dust Hood)..... 3
- Cap Screws M8-1.25 x 20 (Dust Hood)..... 3
- Hex Wrenches 2.5, 3, 4, 6mm..... 1 Each
- Wrenches 10/12, 14/17, 17/19mm 1 Each
- Knife Gauge 1

G0454 Hardware and Tools (not shown)

- Set Screws M8-1.25 x 20 (Wings)..... 6
- Hex Bolts M8-1.25 x 30 (Wings)..... 6
- Flat Washers 8mm (Wings)..... 6
- Lock Washers 8mm (Wings) 6
- Handwheel Bushing 1
- Handwheel Handle 1
- Hex Nut M12-1.75 (Handwheel)..... 1
- Flat Washer 12mm (Handwheel)..... 1
- Flange Bolts M6-1 x 12 (Dust Hood)..... 6
- Hex Wrenches 3, 4, 5, 6mm..... 1 Each
- Wrenches 8/10, 12/14, 17/19mm..... 1 Each
- Knife Gauge 1

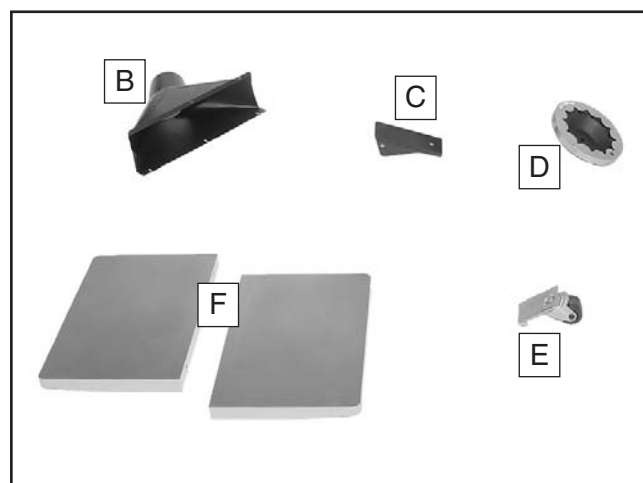


Figure 5. Model G0453/G0454 inventory.

NOTICE

If you cannot find an item on this list, check the mounting location on the machine or the packaging materials. Sometimes parts are pre-installed for shipping, or they become hidden by packaging materials.



Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

Before cleaning, gather the following:

- Disposable Rags
- Cleaner/degreaser (WD-40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

Basic steps for removing rust preventative:

1. Put on safety glasses.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.



! WARNING

Gasoline or products with low flash points can explode or cause fire if used to clean machinery. Avoid cleaning with these products.



! CAUTION

Many cleaning solvents are toxic if concentrated amounts are inhaled. Only work in a well-ventilated area.

NOTICE

Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces. Test all cleaners in an inconspicuous area before using to make sure they will not damage paint.



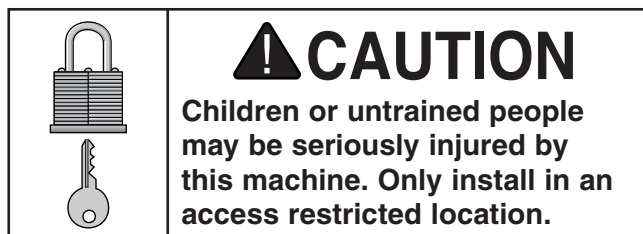
Site Considerations

Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**



Physical Environment

The physical environment where your machine is operated is important for safe operation and the longevity of its components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device.

Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

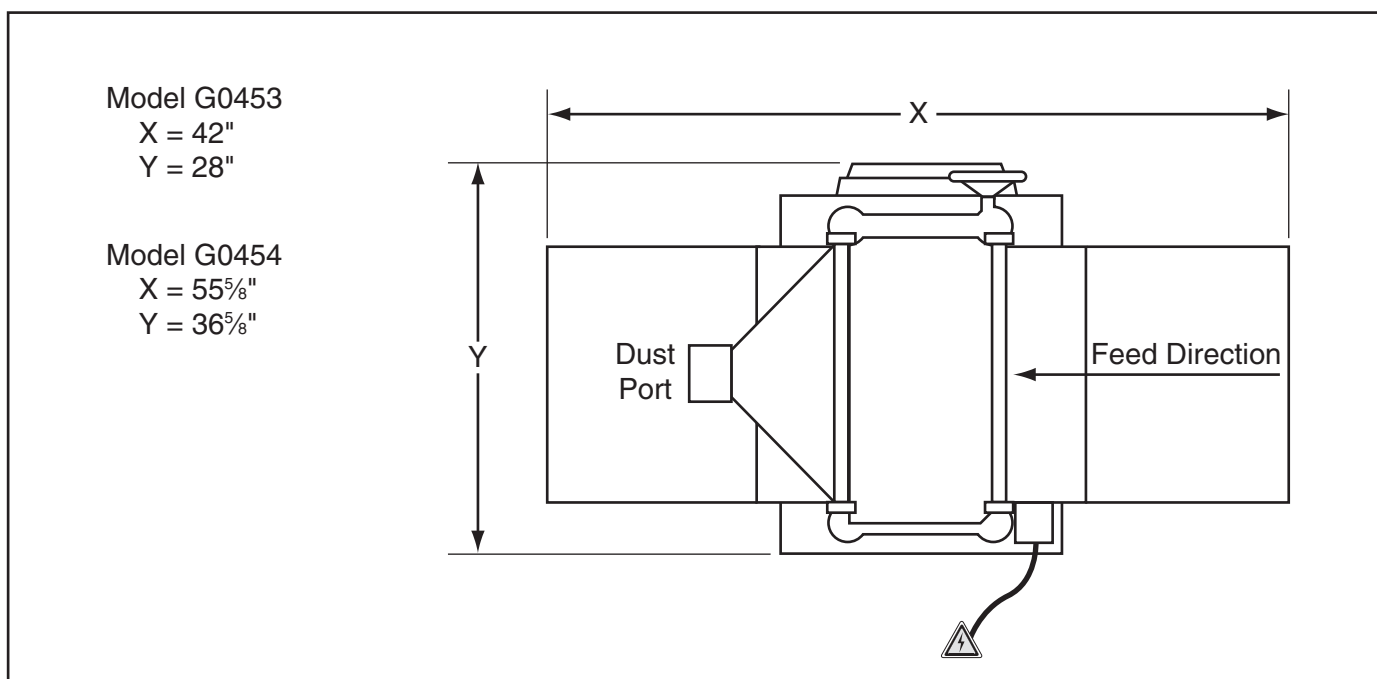
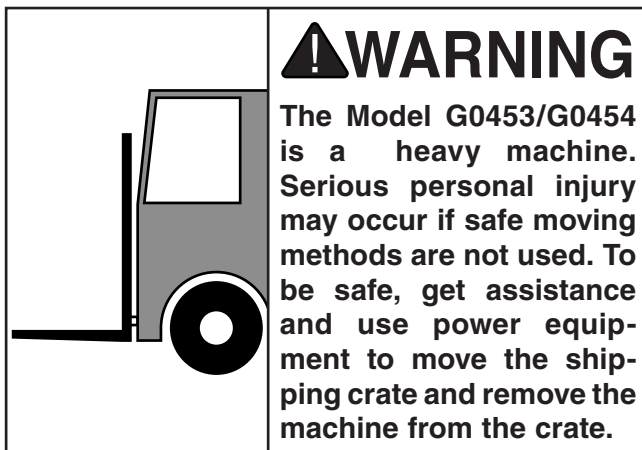


Figure 6. Minimum working clearances.



Lifting & Moving Base Unit



The cabinet stand on the Model G0453/G0454 planer is equipped with four lifting bars that pull out in order to lift and place the planer, as shown in **Figure 7**.

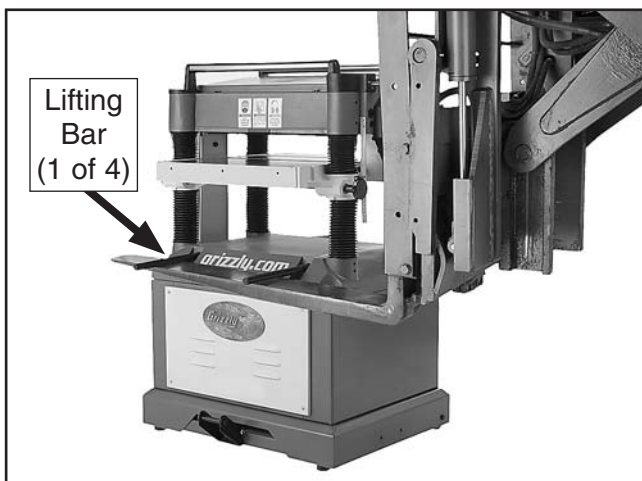


Figure 7. Lifting the planer with a forklift.

Tip: When positioning the lift forks, place shop rags or cardboard between the forks and the cabinet stand to avoid scratching the paint.

Assembly

To assemble your planer:

1. Install M8-1.25 x 20 set screws in the holes in the bottom of the wings (see **Figure 8**).

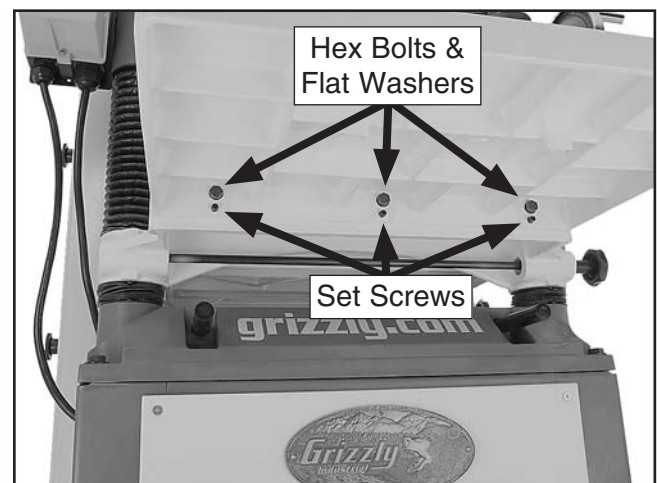


Figure 8. Front extension wing installed (Model G0454 shown).

2. Attach the table extension wings to the planer table with the M8-1.25 x 30 hex bolts, 8mm lock washers, and 8mm flat washers, as shown in **Figure 8**, but do not fully tighten the bolts at this time.
3. Using a straightedge as a guide and the set screws for leveling control, position the extension wings even with the table, then fully tighten the hex bolts.

Note: Be aware that the bed rollers will give you a false reading with your straightedge if they are raised above the table. Move them down or work around them when leveling the extension wings.



4. Place the bushing on the handwheel shaft.
5. Insert the key into the shaft keyway.
6. Screw the handle into the handwheel.
7. Place the handwheel on the shaft and secure it with the M12-1.75 hex nut and 12mm flat washer, as shown in **Figure 9**.



Figure 9. Installing the table height handwheel.

8. **Model G0453:** Attach the dust hood to the top of the planer with the M6-1 x 10 hex bolts, 6mm flat washers, and M6-1 hex nuts as shown in **Figure 10**, then attach the bottom of the dust hood to the planer with the M8-1.25 x 20 cap screws.

Note: You will need to reach into the dust hood to get access for fastening the nuts.

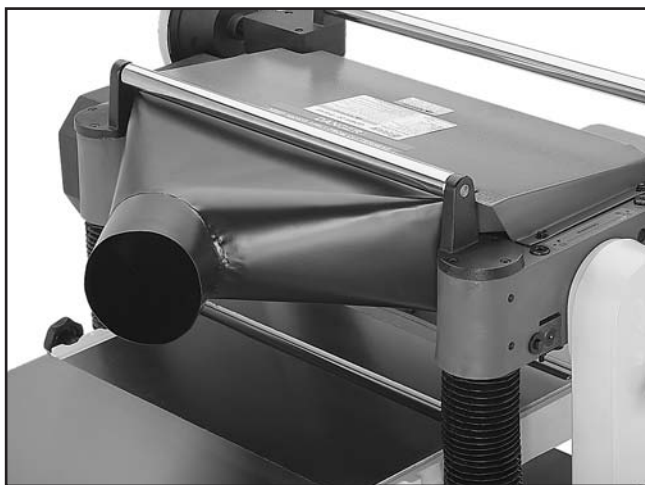


Figure 10. Dust hood attached.

Model G0454: Attach the dust hood with the provided M6-1 x 12 flange bolts.

9. Remove the two cap screws already installed on the left-hand side of the head casting.
10. Attach the switch bracket with the two cap screws, as shown in **Figure 11**.

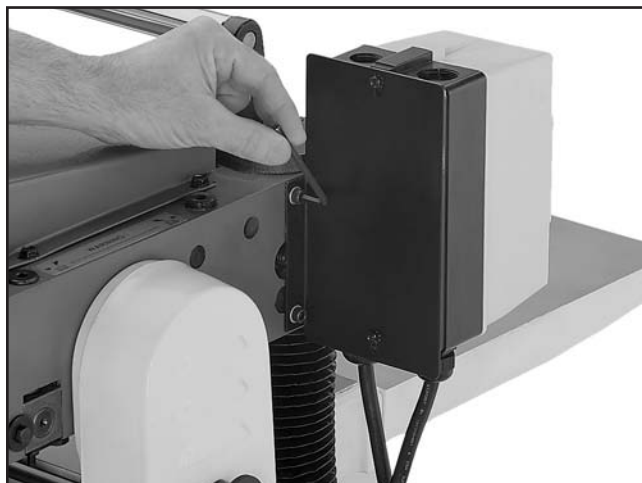


Figure 11. Attaching magnetic switch.

NOTICE

Before starting your machine, you must make sure the gearbox has the proper amount of oil to avoid machine damage.

11. Remove the gearbox fill plug (see **Figure 12**).

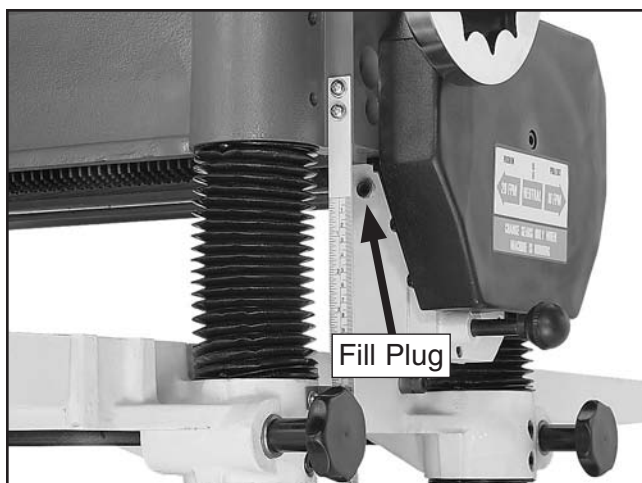


Figure 12. Gearbox fill plug.



12. Using the short end of a clean hex wrench, dip it inside the fill hole and remove it.

—If the end of the hex wrench is coated with oil, then the gearbox oil level is okay. Replace the fill plug and skip to the next section.

—If the end of the hex wrench is not coated with oil, then you need to add more oil. Refer to **Page 32** for instructions on how to do this.

NOTICE

Replace the gearbox oil after the first 20 hours of operation. This is a normal break-in procedure.

13. Remove the pin and hex bolt that are already mounted in the foot pedal bracket.
14. Align the caster assembly with the mounting holes in the foot pedal bracket.
15. Insert the hex bolt into the hole in the back side of the caster assembly, and tighten the bolt just enough for it to be snug without hampering the pivot action of the caster.
16. Install the foot pedal to the caster and secure together by inserting the pin between the two parts.
17. Lock the caster and pedal in place with the E-clip and washers, as shown in **Figure 13**.

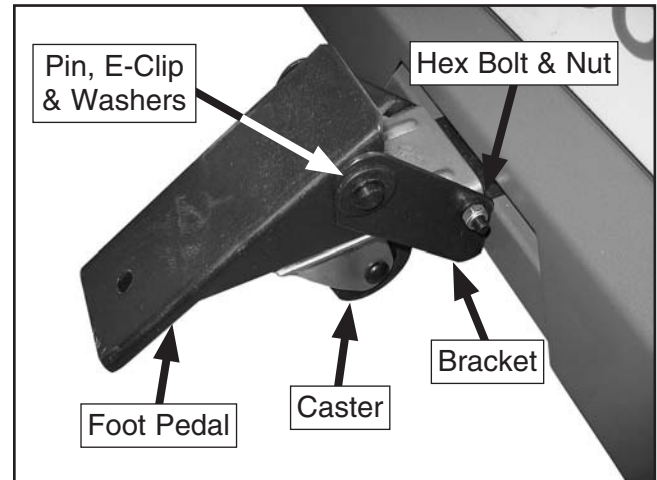


Figure 13. Foot pedal and caster installed.



Dust Collection

⚠ CAUTION

DO NOT operate the Model G0453/G0454 without an adequate dust collection system. This planer creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Recommended CFM at Dust Port

- G0453.....400 CFM
- G0454.....625 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

Check Gearbox Oil

It is critical that you make sure there is oil in the gearbox before proceeding with the test run. Refer to the **Lubrication** instructions for the gearbox on **Page 32** for more details on which type of oil to use, how much to use, and where to put it.



Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation. The test run consists of verifying the following: 1) The motor powers up and runs correctly and 2) the stop button safety feature works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 33**.

If you cannot find a remedy, contact our Tech Support at (570) 546-9663 for assistance.

⚠ WARNING

Before starting the planer, make sure you have performed the preceding assembly and adjustment instructions, and you have read through the rest of the manual and are familiar with the various functions and safety features on this machine. Failure to follow this warning could result in serious personal injury or even death!

To test run the machine:

1. Make sure you understand the safety instructions at the beginning of the manual and that the machine is set up properly.
2. Make sure all tools and objects used during set up are cleared away from the machine.
3. Make sure the gearbox has the correct amount of oil (refer to **Gearbox Oil** on **Page 32** for detailed instructions).



4. Push the OFF button in, then twist it clockwise so it pops out. When the OFF button pops out, the switch is reset and ready for operation (see **Figure 14**).

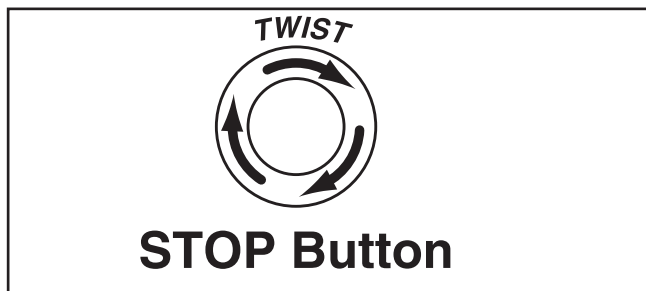


Figure 14. Resetting the switch.

5. Verify that the machine is operating correctly by pushing the ON button.
 - When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.
 - Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.
6. Press the OFF button to stop the machine.
7. WITHOUT resetting the switch, press the ON button. The machine should not start.
 - If the machine does not start, the OFF button safety feature is working correctly. The **Test Run** is complete.
 - If the machine does start (with the OFF button pushed in), immediately disconnect power to the machine. The OFF button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

Re-Tension V-Belts

The final step of the setup process must be done after approximately 16 hours of operation. During this period, the V-belts will stretch and seat into the pulley grooves and need to be properly tensioned to avoid severely reducing the life of the V-belts. Refer to **V-Belts** on **Page 37** for detailed instructions.

Recommended Adjustments

For your convenience, the adjustments listed below have been performed at the factory.

However, because of the many variables involved with shipping, we recommend that you at least verify the following adjustments to ensure the best possible results from your new machine.

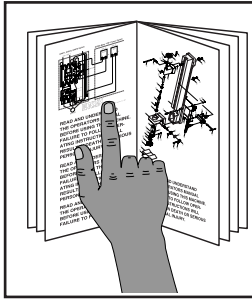
Step-by-step instructions for these adjustments can be found in the **SERVICE** section starting on **Page 33**.

Factory adjustments that should be verified:

- Table height chain tension (**Page 39**).
- Chip breaker height (**Page 40**).
- Pressure bar height (**Page 40**).
- Infeed/outfeed roller height (**Page 40**).
- Roller spring tension (**Page 43**).
- Chip deflector positioning (**Page 43**).



SECTION 4: OPERATIONS

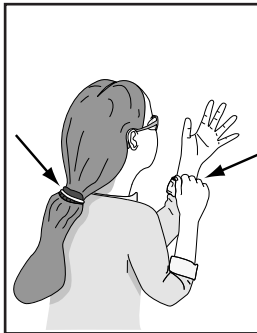
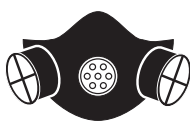


!WARNING

To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.

!WARNING

Damage to your eyes, lungs, and ears could result from using this machine without proper protective gear. Always wear safety glasses, a respirator, and hearing protection when operating this machine.



!WARNING

Loose hair, clothing, or jewelry could get caught in machinery and cause serious personal injury. Keep these items away from moving parts at all times to reduce this risk.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, review industry trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual and seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.

To complete a typical operation, the operator does the following:

1. Examines the workpiece to make sure it is acceptable for planing.
2. Puts on safety glasses or a face shield, a respirator, and ear protection.
3. If necessary, uses a jointer to make one surface of the workpiece flat.
4. Correctly adjusts the worktable height for the operation.
5. If the workpiece is longer than can be supported by the planer table, arranges for assistance or roller accessories to support the workpiece.
6. When all safety precautions have been taken, turns the planer **ON**, then sets the correct feed rate for the operation.
7. Stands to one side of the planer path to reduce the risk of kickback injuries, then, with the flat surface of the workpiece facing down, feeds the workpiece into the planer until the infeed roller grabs it.
8. Once the workpiece is clear of the outfeed roller, turns the planer **OFF**.



Planing Tips

- Use the full width of the planer. Alternate between the left, the right and the middle of the table when feeding lumber into the planer. Your knives will remain sharp much longer.
- Scrape all glue off of joined boards before planing. Dried glue is extremely hard on the knives.
- Plane **ONLY** natural wood fiber. Do not plane wood composites or other materials that could break up in the planer and cause operator injury or property damage.
- To avoid chipping, plane the workpiece with the grain. **NEVER** feed end-cut or end-grained lumber into your planer.
- Keep your work area clear to help ensure safe working conditions.
- Always true any cupped or warped stock on a jointer before planing and feed the workpiece into the planer with the flat face down. This will ensure the workpiece will not rock or twist as it goes through the planer.
- When possible, plane both faces of the workpiece so that they will be parallel with one another.

Workpiece Inspection

Some workpieces are not safe to use or may require modification before they are. **Before cutting, inspect all workpieces for the following:**

- **Material Type:** This machine is only intended for workpieces of natural wood fiber. Attempting to use workpieces of any other material that may break apart during operation could lead to serious personal injury and property damage.
- **Foreign Objects:** Inspect lumber for defects and foreign objects (nails, staples, imbedded gravel, etc.). If you have any question about the quality of your lumber, **DO NOT** use it. Remember, wood stacked on a concrete floor can have small pieces of stone or concrete pressed into the surface.
- **Large/Loose Knots:** Loose knots can become dislodged during operation. Large knots can cause kickback and machine damage. Always use workpieces that do not have large/loose knots.
- **Wet or "Green" Stock:** Avoid using wood with a high water content. Wood with more than 20% moisture content or wood exposed to excessive moisture (such as rain or snow), will cut poorly and cause excessive wear to the machine. Excess moisture can also hasten rust and corrosion of the machine and/or individual components.
- **Excessive Warping:** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being cut. **DO NOT** use workpieces with these characteristics!
- **Minor Cupping:** Workpieces with slight cupping can be safely supported if the cupped side is facing the table. On the contrary, a workpiece supported on the bowed side will rock during operation and could cause severe injury from kickback.



Wood Hardness

The species of wood, as well as its condition, greatly affects the depth of cut the planer can effectively take with each pass.

The chart in the figure below shows the Janka Hardness Rating for a number of commonly used species. The larger the number, the harder the workpiece, and the less material should be removed in any one pass for good results.

Note: The Janka Hardness Rating is expressed in pounds of force required to embed a 0.444" steel ball into the surface of the wood to a depth equal to half the ball's diameter.

Species	Janka Hardness
Ebony	3220
Red Mahogany	2697
Rosewood	1780
Red Pine	1630
Sugar Maple	1450
White Oak	1360
White Ash	1320
American Beech	1300
Red Oak	1290
Black Walnut	1010
Teak	1000
Black Cherry	950
Cedar	900
Sycamore	770
Douglas Fir	660
Chestnut	540
Hemlock	500
White Pin	420
Basswood	410
Eastern White Pine	380
Balsa	100

Figure 15. Janka Hardness Rating for some common wood species.

Feed Rate

The infeed and outfeed rollers move the workpiece through the planer while keeping it flat and providing a consistent rate of movement. The speed that these rollers move the workpiece through the planer is known as the feed rate.

Generally, low feed rates are used for dimensioning passes, while higher feed rates are used for finishing passes.

Figure 16 illustrates the three different positions of the feed rate control knob:

- Push the knob in to use the high feed rate (30 FPM for Model G0453, and 20 FPM for Model G0454).
- Pull the knob out to use the low feed rate of 16 FPM.
- Move the knob to the center position to place the gearbox in neutral.

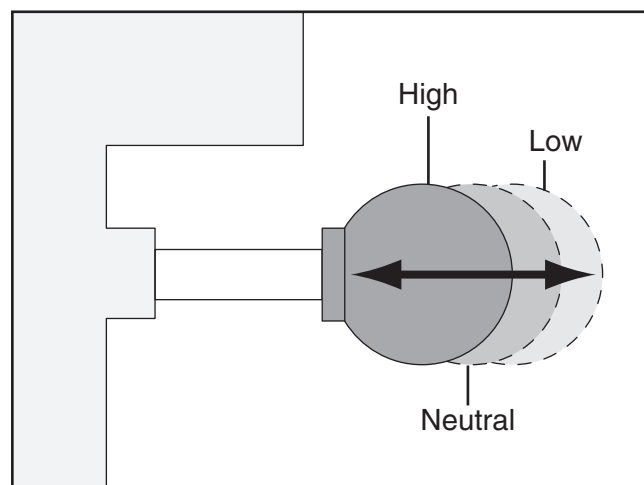


Figure 16. Feed rate control knob positions.

NOTICE

Only change the feed rate when the planer is running, but DO NOT attempt to change the feed rate during any cutting operations or damage to the gearbox will result.



Depth of Cut

The depth of cut on a planer means the amount of material that is removed from the top of the workpiece as it passes underneath the cutterhead.

The depth of cut is set by adjusting the distance of the table below the cutterhead. This distance is the thickness of the workpiece minus the depth of cut.

Although the correct depth of cut varies according to wood hardness and workpiece width, we recommend a maximum depth of cut no more than $\frac{1}{16}$ ". A series of light cuts will give better end results and put less stress on the planer than trying to take off too much material in a single pass.

The planing depth of cut is controlled by using the table height handwheel on the right side of the machine. Rotating the handwheel clockwise raises the table.

The depth of cut is read directly from the inch/milimeter scale on the front of the planer, as shown in **Figure 17**.

One complete turn of the handwheel raises or lowers the table approximately $\frac{1}{16}$ ". The range of material thickness that can be planed is $\frac{3}{16}$ "–8".

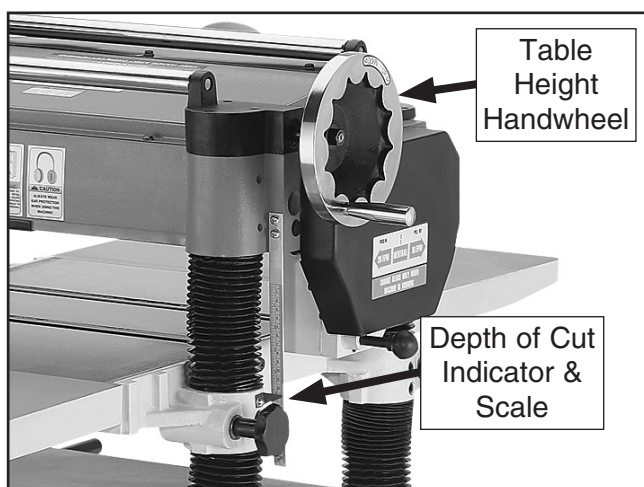


Figure 17. Depth of cut indicator and scale.

Bed Roller Height

Bed Roller Height Range0.002"–0.020"

The correct height of the bed rollers will vary, depending on the type of material you intend to plane. However, as a general rule, keep the bed roller height within 0.002"–0.020" above the table surface, as illustrated in **Figure 18**.

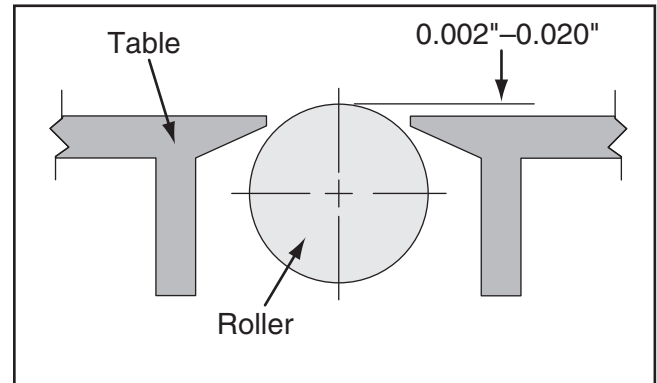


Figure 18. Recommended bed roller height above the table surface.

When planing rough stock, set the rollers high to keep the lumber from dragging along the bed. When planing milled lumber, set the rollers low to help minimize snipe.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator (refer to **Page 28**) to gauge the bed roller height from the table surface. If a Rotacator is not available, a straightedge and feeler gauges can be used, but care must be taken to achieve accurate results.



NOTICE

Bed rollers that are not adjusted to the correct height or out of alignment with each other can cause poor finishes, inconsistent planing thickness, and other undesirable results.

Tools Needed	Qty
Hex Wrench 3mm.....	1
Wrench 14mm	1
Rotacator	1

To adjust the bed rollers:

1. DISCONNECT PLANER FROM POWER!
2. Lower the table all the way to give yourself room to work.
3. Loosen the set screws above each of the four roller adjustment hex bolts (see **Figure 19**).

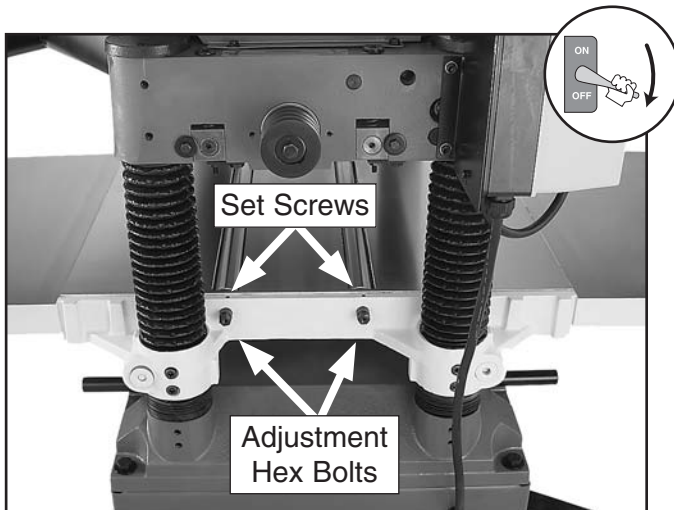


Figure 19. Bed roller height controls.

4. Rotate the eccentric adjustment hex bolts to raise or lower the bed rollers until they are the desired height above the table surface.
5. Verify that both sides of each roller are at the same height, then re-tighten the four set screws to secure the setting.
6. Re-check the roller heights to make sure they did not change when you secured them.

—If the roller heights are not correct, repeat this procedure until they are.



SECTION 5: ACCESSORIES

!WARNING

Some aftermarket accessories can be installed on this machine that could cause it to function improperly, increasing the risk of serious personal injury. To minimize this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to the newest copy of the Grizzly Catalog for other accessories available for this machine.

Call 1-800-523-4777 To Order

G1738—Rotacator™ Precision Planer Tool

The Rotacator is a dial indicator on a magnetic base and is designed for quickly and accurately setting the critical tolerances needed when adjusting any planer, so that nasty surprises such as non-parallel and chattered cuts can be eliminated. Helps adjust infeed/outfeed rollers, pressure bars, chip breakers, and bed rollers. Also a great setup tool for other machines! Accurate to 0.001". Indicator rotates 360°

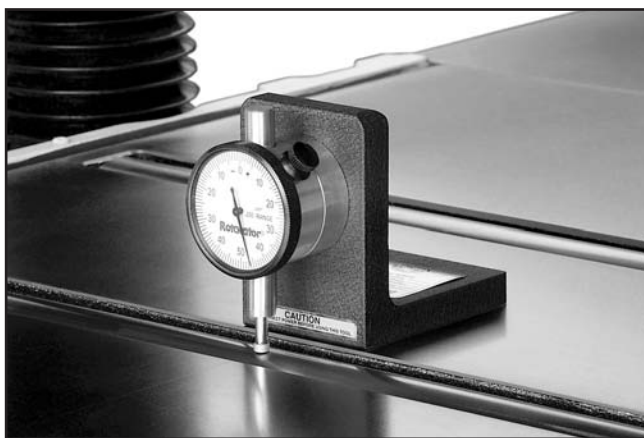


Figure 20. Rotacator™ Precision Planer Tool.

G6701—HSS Replacement Knives for Model G0453, Set of 3

G6702—HSS Replacement Knives for Model G0454, Set of 4

G2790—Universal Knife Grinder

This dry-type Knife Grinder is ideal for sharpening planer and jointer knives. High quality cast iron construction, together with large knife holding capacity (will sharpen up to 20" planer/jointer knives) makes this grinder an excellent investment. Features a heavy-duty ½ HP 110V motor, knife holding angle adjustable from 20° to 70°, and adjustable-height 120 grit grinding wheel.



Figure 21. G2790 Universal Knife Grinder.

H7768—15" Byrd® Shelix Cutterhead

H7768—20" Byrd® Shelix Cutterhead

Made in the USA by Byrd, this indexable carbide insert cutterhead is the best money can buy—period! The inserts are not only placed in a spiral pattern, they are also positioned at an angle so the shearing action leaves a glassy smooth cut on the toughest and most figured woods. Comes with 5 extra replacement inserts. Great upgrade!

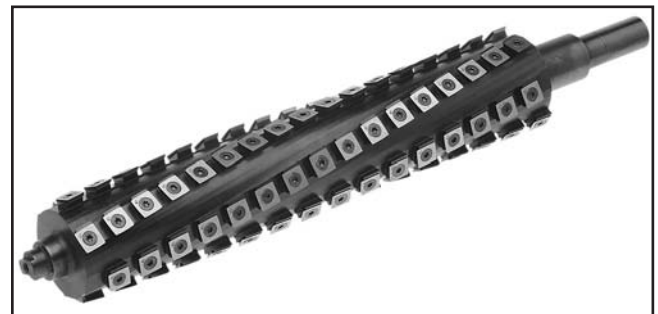


Figure 22. Byrd® Shelix Cutterhead.



- T20501—Face Shield Crown Protector 4"**
- T20502—Face Shield Crown Protector 7"**
- T20503—Face Shield Window**
- T20448—Economy Clear Safety Glasses**
- T20452—"Kirova" Anti-Reflective Glasses**
- T20456—"Dakura" Clear Safety Glasses**
- H0736—Shop Fox® Safety Glasses**

These glasses meet ANSI Z87.1-2003 specifications. Buy extras for visitors or employees. You can't be too careful with shop safety!



Figure 23. Our most popular eye protection.

G8982—Roller Table

Use this versatile roller table wherever you need extra workpiece support. Features all steel welded construction and measures 19" x 65" long. Comes with 9 ball bearing rollers and has four independently adjustable legs for any leveling requirement. Adjustable in height from 26³/₈" to 44¹/₈".



Figure 24. SHOP FOX® Roller Table.

- H9155—Dispoz-A-Blade® System 15"**
(Includes 3 Holders & Knife Inserts)
- G5858—Dispoz-A-Blade® Knife Inserts 15"**
HSS (Set of 3)
- H9156—Dispoz-A-Blade® System 20"**
(includes 4 Holders & Knife Inserts)
- G5859—Dispoz-A-Blade® Knife Inserts 20"**
HSS (Set of 4)

Install a Dispoz-A-Blade® Knife system in your new planer and save up to 70% on knife replacements for the life of your machine. Each knife insert is double-edged, so you get two knives in one, and is indexed so that all knife inserts can be installed at the same height in just minutes. Yes, that means you can throw away the knife gauge!

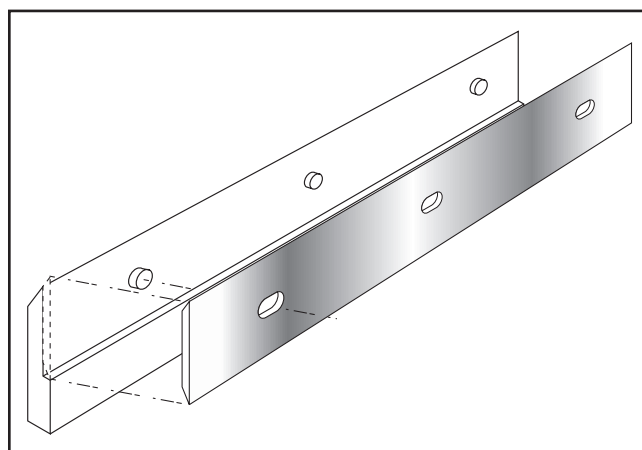


Figure 25. Dispoz-A-Blade® Holder and Knife.

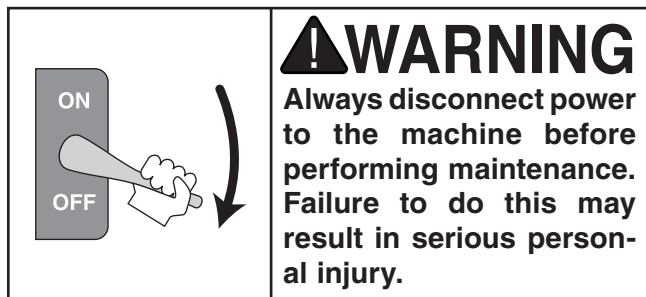
- G5562—SLIPIT® 1 Qt. Gel**
- G5563—SLIPIT® 12 oz Spray**
- G2871—Boeshield® T-9 12 oz Spray**
- G2870—Boeshield® T-9 4 oz Spray**
- H3788—G96® Gun Treatment 12 oz Spray**
- H3789—G96® Gun Treatment 4.5 oz Spray**



Figure 26. Recommended products for protecting unpainted cast iron/steel part on machinery.



SECTION 6: MAINTENANCE



Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Note: *This maintenance schedule is based on average daily usage. Adjust the maintenance schedule to match your usage to keep your planer running smoothly and to protect your investment.*

Every 8 Hours of Operation:

- Clean machine and protect unpainted cast iron.
- Lubricate feed rollers bushings (**Page 31**).
- Tighten loose mounting bolts.
- Check/sharpen/replace damaged or worn knives (**Page 36**).
- Check/repair/replace worn or damaged wires.
- Resolve any other unsafe condition.

Every 40 Hours of Operation:

- Clean cutterhead and check knife height (**Page 36**).
- Lubricate table columns and leadscrews (**Page 31**).

Every 160 Hours of Operation:

- Check/tension/replace V-belts (**Page 37**).
- Clean/vacuum dust buildup from inside cabinet and off motor.
- Lubricate table height worm gear (**Page 31**).
- Lubricate table height chain and sprockets (**Page 32**).
- Lubricate drive chain and sprockets (**Page 32**).

Yearly:

- Change gearbox oil (**Page 32**).

Cleaning & Protecting

Vacuum excess wood chips and sawdust from the outside of the machine, inside the cabinet, and off the motor. Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep tables rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Section 5: Accessories** on **Page 29** for more details).



Lubrication

NOTICE

Failure to followed reasonable lubrication practices as instructed in this manual for your lathe could lead to premature failure of your lathe and will void the warranty.

Your planer features bearings that are lubricated and sealed at the factory. These bearing do not require any further attention unless they need to be replaced. If a bearing fails, your planer will probably develop a noticeable rumble or vibration, which will increase when the machine is under a load. The bearings are standard sizes and can be replaced through Grizzly (refer to the **Parts Breakdowns** beginning on **Page 49** for bearing identification).

Follow the maintenance schedule on **Page 30** and the procedures listed below to properly lubricate the other planer components, which are essential for long life and trouble-free operation of your planer.

Feed Roller Bushings

The infeed and outfeed rollers rotate inside bushing blocks on both ends of the rollers. Add 2–3 drops of SAE 30W oil to the center hole of the four feed roller tension adjustment bolts on top of the head casting, as shown in **Figure 27**.

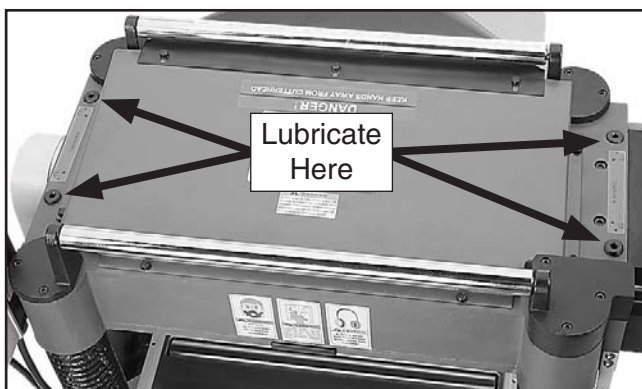


Figure 27. Lubrication locations for the feed roller bushings.

Columns and Leadscrews

The table rides on the columns and is moved by the rotation of the leadscrews inside the columns. Loosen the dust sleeve (see **Figure 28**) to access the columns and leadscrews. Apply a thin coat of SAE 30W oil to the outside surface of the columns and brush on a light application of multi-purpose grease to the leadscrew threads. Move the table up and down to distribute the lubricant.

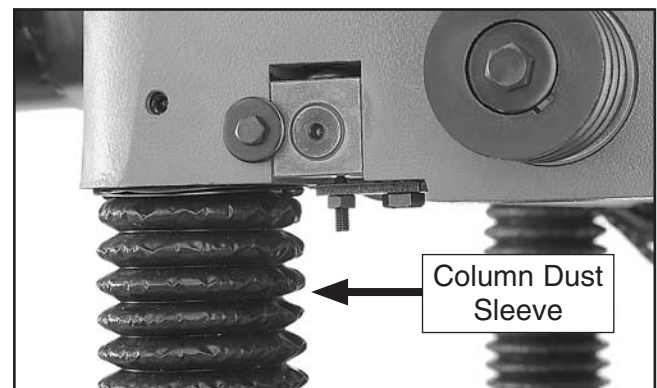


Figure 28. Column dust sleeve.

Table Height Worm Gear

Remove the three cap screws that secure the worm gear housing (see **Figure 29**), then lift the housing and handwheel assembly off the machine. Clean away any debris from the housing and gears, then brush on a moderate amount of multi-purpose grease to the gear teeth.

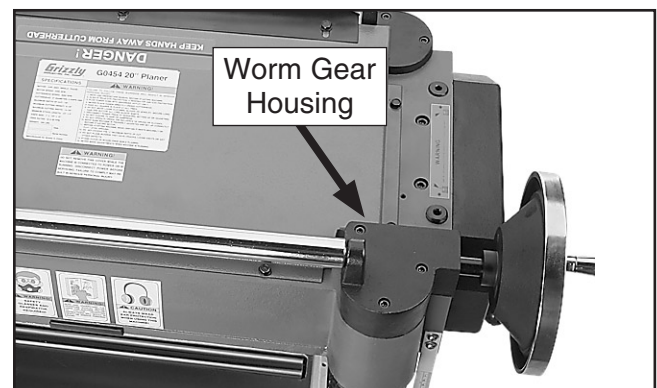


Figure 29. Location of the table height worm gear housing.



Table Height Chain & Sprockets

The table leadscrews are synchronized by the table height chain and sprockets located underneath the base of the planer. Remove the front and rear cabinet panels to access these parts (see **Figure 30**). Use shop rags and mineral spirits to clean away debris and grime, then brush on a light coat of multi-purpose grease to the chain and sprockets.

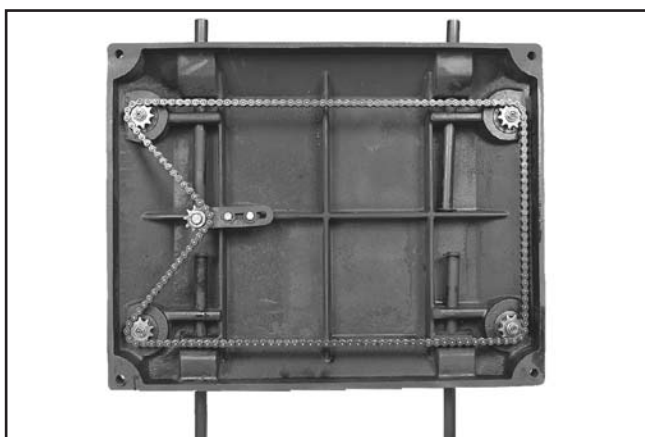


Figure 30. Table height chain and sprockets as viewed from underneath the base.

Drive Chain & Sprockets

The infeed and outfeed rollers receive the transferred power from the cutterhead through the drive chain system on the right side of the machine, as shown in **Figure 31**.

Remove the table height handwheel and the safety covers attached to the inside of the drive chain cover, then remove the cover to access these parts.

Use shop rags and mineral spirits to clean away any debris and grime, then brush on a light coat of multi-purpose grease to the chain and sprockets.

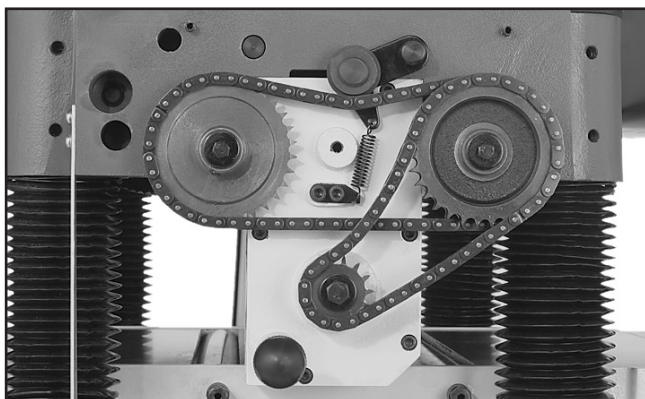


Figure 31. Drive chain and sprockets.

Gearbox Oil

The gearbox oil should be changed after the first 20 hours of operation to clear away any debris inside the gearbox, then changed annually thereafter.

Although it is not necessary to remove the drive chain cover to access the fill and drain plugs, it is more convenient to do so (see **Figures 32–33**). Replace the gearbox oil with 80W–90W gear oil until it just reaches the fill plug.

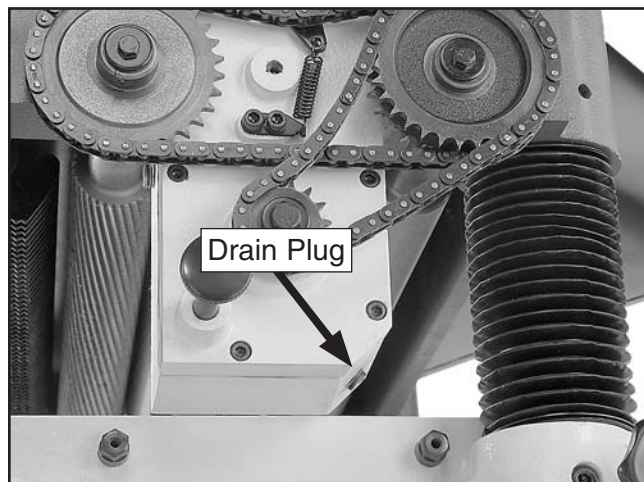


Figure 32. Gearbox drain plug.

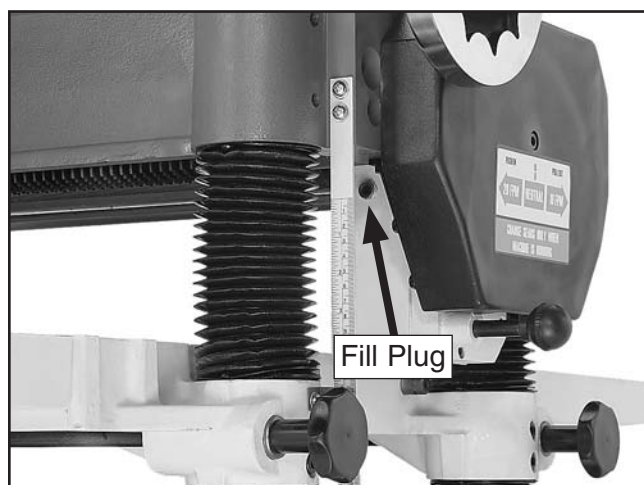


Figure 33. Gearbox fill plug.

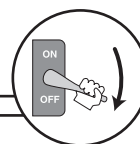


SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support at (570) 546-9663.

Note: Please gather the serial number and manufacture date of your machine before calling.

Troubleshooting

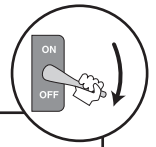


Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> 1. Stop push-button engaged/faulty. 2. Power supply switched OFF or at fault. 3. Thermal overload relay has tripped. 4. Wall circuit breaker tripped. 5. Plug/receptacle at fault/wired wrong. 6. Motor connection wired wrong. 7. Contactor not energized/has poor contacts. 8. Wiring open/has high resistance. 9. ON/OFF switch at fault. 10. Start capacitor at fault. 11. Centrifugal switch at fault. 12. Motor at fault. 	<ol style="list-style-type: none"> 1. Rotate button to reset/replace it. 2. Ensure power supply is on/has correct voltage. 3. Reset; adjust trip load dial if necessary; replace. 4. Ensure circuit size is correct/replace weak breaker. 5. Test for good contacts; correct the wiring. 6. Correct motor wiring connections (Pages 47–48). 7. Test all legs for power/replace if faulty. 8. Check/fix broken, disconnected, or corroded wires. 9. Replace switch. 10. Test/replace if faulty. 11. Adjust/replace centrifugal switch. 12. Test/repair/replace.
Machine stalls or is underpowered.	<ol style="list-style-type: none"> 1. Feed rate too fast. 2. Workpiece material not suitable. 3. Dust collection ducting problem. 4. Motor overheated. 5. Machine undersized for task. 6. V-belt(s) slipping. 7. Motor wired incorrectly. 8. Plug/receptacle at fault. 9. Run capacitor at fault. 10. Pulley/sprocket slipping on shaft. 11. Motor bearings at fault. 12. Contactor not energized/has poor contacts. 13. Motor at fault. 14. Centrifugal switch at fault. 	<ol style="list-style-type: none"> 1. Decrease feed rate. 2. Only cut wood/ensure moisture is below 20%. 3. Clear blockages, seal leaks, use smooth wall duct, eliminate bends, close other branches. 4. Clean motor, let cool, and reduce workload. 5. Use sharp blades/inserts; reduce feed rate or depth of cut. 6. Tension/replace belt(s) (Page 37); ensure pulleys are aligned (Page 45). 7. Wire motor correctly (Pages 47–48). 8. Test for good contacts/correct wiring. 9. Test/repair/replace. 10. Replace loose pulley/shaft. 11. Test/repair/replace. 12. Test all legs for power/replace if faulty. 13. Test/repair/replace. 14. Adjust/replace centrifugal switch.
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> 1. Belts slapping cover. 2. Knives/gibs at fault. 3. Blade at fault. 4. V-belt(s) worn or loose. 5. Pulley loose. 6. Motor mount loose/broken. 7. Machine incorrectly mounted. 	<ol style="list-style-type: none"> 1. Replace/realign belts with a matched set. 2. Resharpen/replace knives; set knife alignment/height correctly. 3. Replace warped/bent blade; resharpen dull blade. 4. Inspect/replace belts with a new matched set. 5. Realign/replace shaft, pulley, setscrew, and key. 6. Tighten/replace. 7. Tighten mounting bolts; relocate/shim machine.



Motor & Electrical (continued)



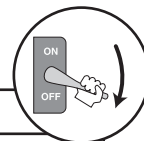
Symptom	Possible Cause	Possible Solution
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> Motor fan rubbing on fan cover. Bed rollers protruding unevenly. Motor bearings at fault. Cutterhead bearings at fault. Centrifugal switch is at fault. Chip deflector hitting knives. 	<ol style="list-style-type: none"> Fix/replace fan cover; replace loose/damaged fan. Adjust bed rollers (Page 26). Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement. Replace bearing(s)/realign cutterhead. Replace switch. Check/replace chip deflector and realign (Page 43).

Machine Operation

Symptom	Possible Cause	Possible Solution
<p>Excessive snipe (gouge at the end of the workpiece that is uneven with the rest of the cut).</p> <p>Note: A small amount of snipe is inevitable with all types of planers—the key is to minimize it.</p>	<ol style="list-style-type: none"> One or both of the bed rollers are set too high. Rear extension wing slopes down or is not level with main table. Chip breaker or pressure bar set too low. Workpiece is not properly supported as it leaves the planer. 	<ol style="list-style-type: none"> Lower the bed rollers (Page 26). Adjust the rear extension wing set screws to make the extension level with the main table (Page 18). Raise the height of the chip breaker or pressure bar (Page 40). Use an assistant or roller beds/stands to properly support the workpiece as it leaves the planer.
Workpiece stops/slow in the middle of the cut.	<ol style="list-style-type: none"> Depth of cut too deep. Pitch and glue build-up on planer components. One or both of the bed rollers are set too low or too high. Chip breaker or pressure bar set too low. Feed rollers set too low or too high. 	<ol style="list-style-type: none"> Reduce the depth of cut (Page 26). Clean planer components with a pitch/resin dissolving solvent. Lower/raise the bed rollers (Page 26). Raise the height of the chip breaker or pressure bar (Page 40). Adjust the feed rollers to the correct height (Page 40).
Consistent chipping pattern.	<ol style="list-style-type: none"> Knots or conflicting grain direction in workpiece. Nicked or chipped knife. Feed rate too fast. Depth of cut too deep. Misaligned chip breaker. 	<ol style="list-style-type: none"> Inspect workpiece for knots and grain direction; use only clean stock (Page 24). Sharpen/replace knife (Page 36). Reduce feed rate (Page 25). Reduce the depth of cut (Page 26). Adjust both sides of chip breaker to the correct height (Page 40).



Machine Operation (continued)



Symptom	Possible Cause	Possible Solution
Fuzzy grain.	<ol style="list-style-type: none"> 1. Workpiece has high moisture content or surface wetness. 2. Dull knives/inserts. 	<ol style="list-style-type: none"> 1. Sticker and allow workpiece to dry if moisture content is over 20% or has surface wetness. 2. Sharpen/replace knives (Page 36).
Long lines or ridges that run the length of the workpiece.	<ol style="list-style-type: none"> 1. Nicked or chipped knife. 	<ol style="list-style-type: none"> 1. Sharpen/replace knives (Page 36).
Uneven cutting marks, wavy surface, or chatter marks across the face of the workpiece.	<ol style="list-style-type: none"> 1. Feed rate too fast. 2. Chip breaker or pressure bar set unevenly. 3. One or both of the bed rollers are set too low or too high. 4. Knife heights not correct. 5. Worn cutterhead bearings. 	<ol style="list-style-type: none"> 1. Reduce feed rate (Page 25). 2. Adjust the height of the chip breaker or pressure bar (Page 40). 3. Lower/raise the bed rollers (Page 26). 4. Adjust knives to the proper height (Page 36). 5. Replace cutterhead bearings.
Glossy surface.	<ol style="list-style-type: none"> 1. Knives are dull. 2. Feed rate too slow. 3. Depth of cut too shallow. 	<ol style="list-style-type: none"> 1. Sharpen/replace knives (Page 36). 2. Increase feed rate (Page 25). 3. Increase depth of cut (Page 26).
Inconsistent chip marks.	<ol style="list-style-type: none"> 1. Chips are not being properly expelled from around the cutterhead. 	<ol style="list-style-type: none"> 1. Use an adequate dust collection system; adjust the chip deflector in or out, depending upon your setup (Page 43).



Setting/Replacing Knives

⚠ CAUTION

Planer knives are extremely sharp and can quickly cause a serious injury to your hands or fingers. Always wear heavy leather gloves when handling these knives to reduce the risk of cutting injuries.

Setting the height of the knives correctly is crucial to the proper operation of your planer and is very important in keeping the knives sharp. If one knife protrudes higher than the others, it will do the majority of the work, dull much faster, and produce poor cutting results.

The knife gauge that is included with the Model G0453/G0454 is designed to set the knives 0.059" higher than the cutterhead surface.

Note: If you need to replace or sharpen a knife, you can remove the knife from the cutterhead during **Step 4** of the following procedure. Thoroughly clean out any debris from the knife slots before replacing the knives.

Replacement knives are available through Grizzly (refer to **Page 28** for options).

Tools Needed	Qty
Hex Wrench 2.5mm (G0453).....	1
Wrench 10mm (G0453)	1
Hex Wrench 3mm (G0454).....	1
Wrench 12mm (G0454)	1
Knife Gauge	1

To adjust the height of the knives:

1. DISCONNECT PLANER FROM POWER!
2. Remove the dust hood and the top cover to expose the cutterhead.
3. Remove the belt cover, then rotate the cutterhead pulley to give you good access to one of the knives.

Note for G0454 Only: The cutterhead for the Model G0454 ships with both springs and jack screws to adjust the knife height (see **Figure 34**)—which one you use is up to your personal preference. However, you should remove the components that you will not use from the cutterhead before proceeding.

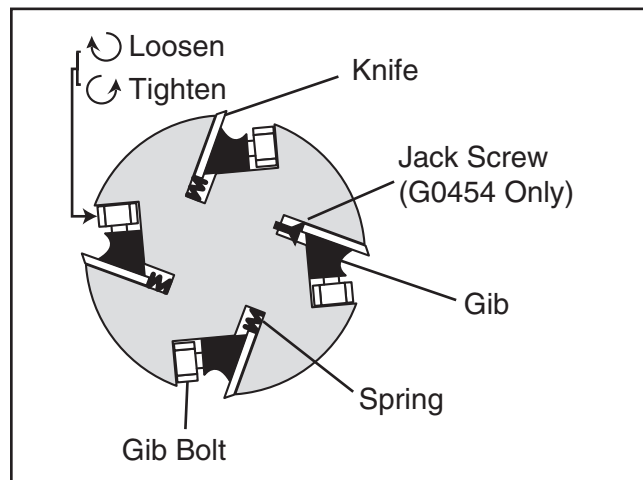


Figure 34. Cutterhead components (G0454 cutterhead shown).

4. If you have not already done so, loosen the cutterhead gib bolts until the knife is completely loose, then position the knife gauge over the knife so that the knife edge is directly under the center pad, as shown in **Figure 35**.

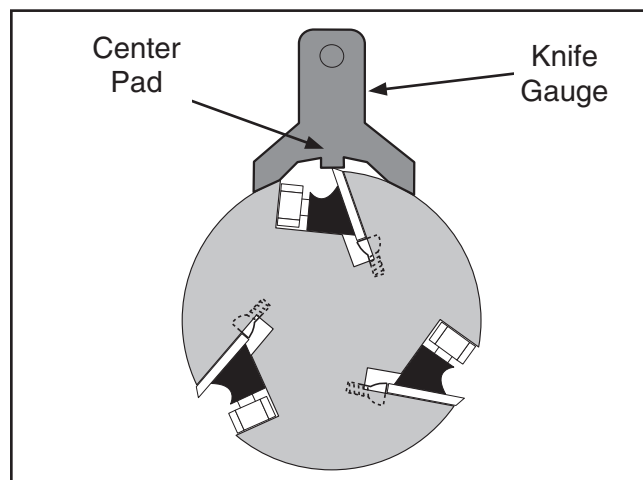


Figure 35. Knife gauge correctly positioned over the knife (G0453 cutterhead shown).



V-Belt Tensioning/ Replacement

- Jack Screws (G0453 & G0454):** Insert the hex wrench into the jack screws through the access holes in the cutterhead (see **Figure 36**). Rotate the jack screws to raise or lower the knife until it barely touches the center pad of the knife gauge with all legs of the gauge still firmly on the cutterhead, then snug the gib bolts enough to hold the knife in place.

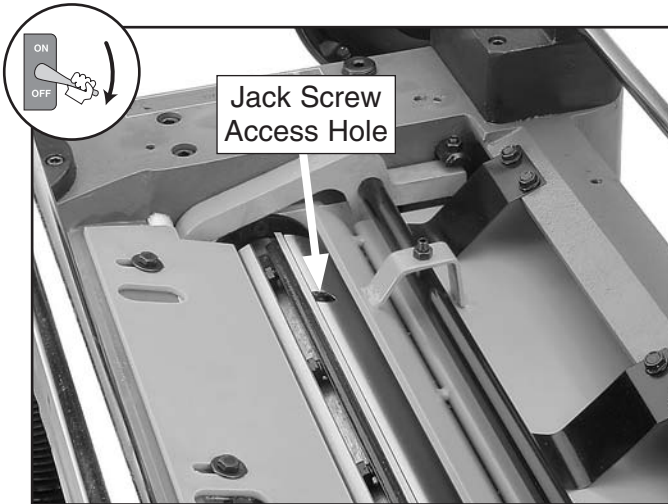


Figure 36. Jack screw access hole in the cutterhead.

Springs (G0454 Only): Push down on the knife gauge until all legs of the gauge are firmly on the cutterhead and the knife just touches the center pad of the gauge, then tighten the gib bolts enough to hold the knife in place.

- Slightly tighten the gib bolts, starting at the middle and working your way to the ends by alternating left and right, as illustrated in **Figure 37**.

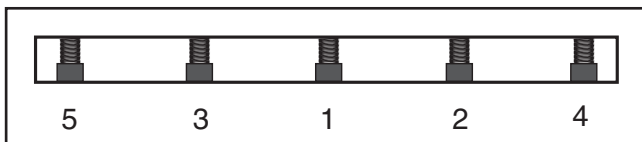


Figure 37. Gib bolt tightening sequence.

- Repeat **Step 6**.
- Repeat **Step 6**, but final tighten the gib bolts.
- Repeat **Steps 4–8** for the rest of the knives.

NOTICE

After the first 16 hours of use, the V-belts will stretch and seat into the pulley grooves. The V-belts must be properly re-tensioned after this period to avoid severely reducing their useful life.

Three cogged V-belts transfer power from the motor to the cutterhead, and then to the infeed and outfeed rollers with the use of the drive chain system. To ensure efficient transfer of power to these systems, make sure the V-belts are always properly tensioned and in good condition.

If the V-belts are worn, cracked, or damaged, replace them. Always replace the V-belts with a matched set of three, or belt tension may not be even among the belts, causing premature belt failure.

Tools Needed

	Qty
Phillips Screwdriver	1
Wrench 19mm	1

To tension/replace the V-belts:

- DISCONNECT PLANER FROM POWER!

CAUTION

V-belts and pulleys will be hot after operation. Allow them to cool before handling them.



2. Remove the V-belt cover from the left side of the machine to expose the belts, as shown in **Figure 38**.

Note: A collection of black belt dust at the bottom of the belt cover is normal during the life of the belts.

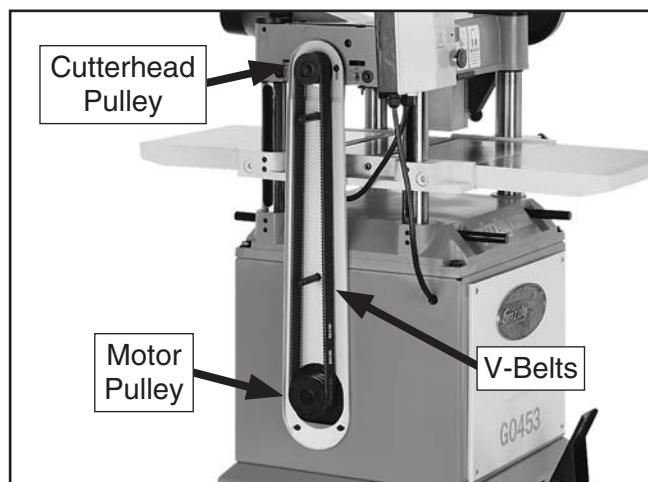


Figure 38. Belt cover removed to expose the V-belts and pulleys.

3. Remove the front cabinet panel to access the motor, as shown in **Figure 39**.

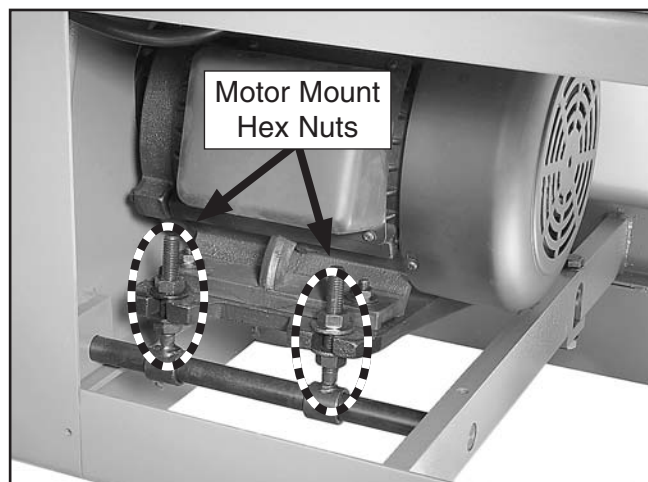


Figure 39. Front cabinet cover removed to expose the motor.

4. If the V-belts need to be replaced, raise the motor to release the belt tension (refer to the next step for instructions), roll them off the pulleys, then replace them as a matched set of 3.
5. To adjust the V-belt tension, loosen the top motor mount hex nuts (see **Figure 39**), then adjust the bottom hex nuts to raise or lower the motor.

Note: The V-belts are correctly tensioned when there is approximately $\frac{3}{4}$ " deflection when moderate pressure is applied to them midway between the pulleys, as illustrated in **Figure 40**.

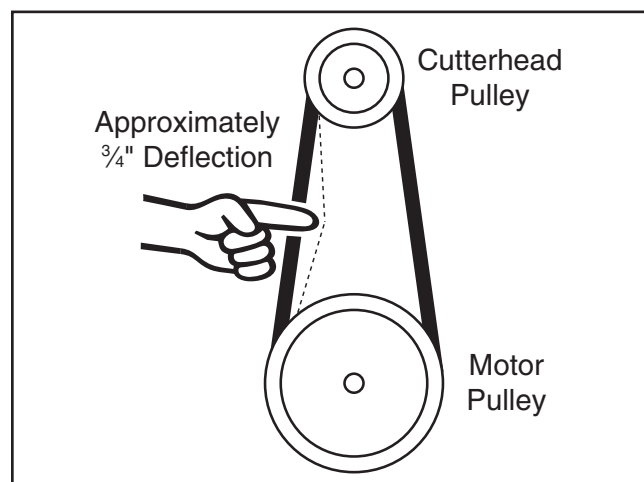


Figure 40. Belt deflection when V-belts are correctly tensioned.

6. When the V-belts are correctly tensioned, make sure the motor mount hex nuts are tight, then replace the cabinet cover and the belt cover.



Table Height Chain Tension

The table height chain transfers movement from the elevation handwheel to the columns that control table height. The chain drive can be adjusted to remove slack if the chain stretches over time or is loosened during table leveling procedures.

Tools Needed	Qty
Phillips Screwdriver #2	1
Wrench or Socket 12mm	1

To adjust the table height chain tension:

1. DISCONNECT PLANER FROM POWER!
2. Remove the front and rear cabinet panels to gain access to the chain system, as shown in **Figure 41**.

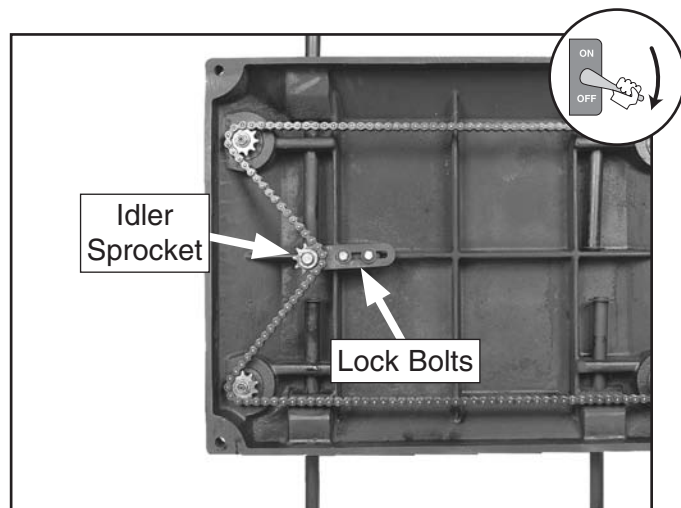


Figure 41. Table height idler sprocket and lock bolts (viewed from underneath the planer base).

NOTICE

During the next step, **DO NOT** let the chain fall off the sprockets. It can be very difficult to return the chain to its proper location on the sprockets without changing the table adjustments.

3. Loosen the lock bolts shown in **Figure 41**, and push the idler sprocket against the chain with moderate hand pressure, then while maintaining the pressure on the idler sprocket, re-tighten both lock bolts.
4. Clean and lubricate the chain and sprockets (refer to **Table Height Chain & Sprockets** on **Page 32** for detailed instructions).



Feed Rollers, Chip Breaker & Pressure Bar Heights

It is essential that the feed rollers, chip breaker, and pressure bar are set at the correct distance below the cutterhead to ensure that the workpiece moves through the planer evenly and the correct distance from the cutterhead knives.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator for these adjustments (refer to **Page 28**).

If a Rotacator is not available, a 6' 2x4 cut into two even sized pieces and a feeler gauge set can be used, but care must be taken when jointing the wood to achieve accurate results.

Dist. Below Knife Edge at BDC (Figure 42)

A. Infeed Roller	0.040"
B. Chip Breaker.....	0.040"
C. Pressure Bar.....	0.008"
D. Outfeed Roller	0.020"

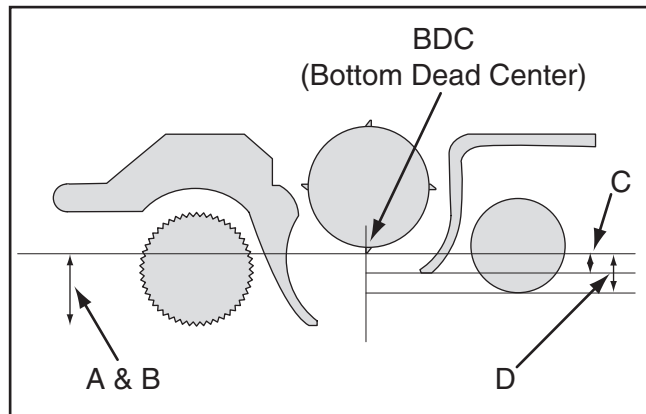


Figure 42. Planer component recommended clearances (illustration is not to scale).

Using a Rotacator

Tools Needed

	Qty
Hex Wrenches 3, 5mm.....	1 Each
Wrench or Socket 10mm.....	1
Rotacator (see Page 28)	1

1. DISCONNECT PLANER FROM POWER!
2. Make sure the knives are set to the correct height (refer to **Setting/Replacing Knives** on **Page 36** for detailed instructions).
3. Lower the table at least 4" below the head casting, then lock it in place.
4. Remove the dust hood, top cover, and belt cover.
5. Using your Rotacator, find the BDC of any knife edge by slowly rocking the cutterhead pulley back and forth, then set the Rotacator dial to zero (see **Figure 43**).

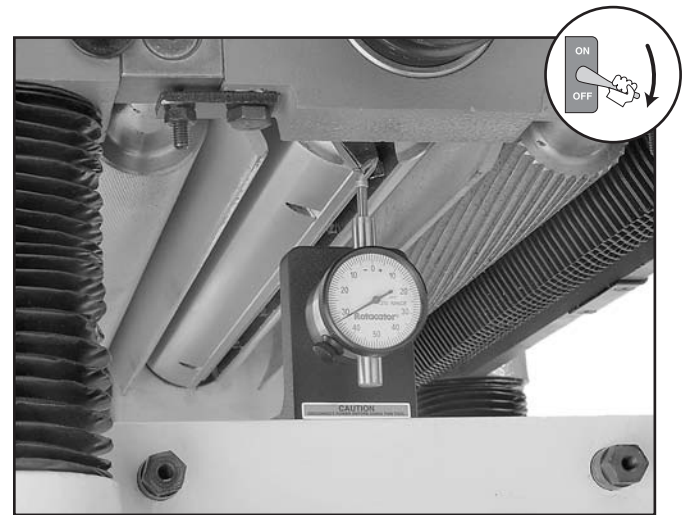


Figure 43. Using a Rotacator to find BDC.



6. Move the feed speed knob to the neutral position to allow the infeed roller to freely rotate.
7. Keeping the Rotacator dial at zero, position it under the right-hand side of the infeed roller and find the BDC of a serrated edge by rocking the infeed roller back and forth.
8. Loosen the jam nut and use the set screw shown in **Figure 44** to adjust the height of the infeed roller bushing block until the Rotacator dial shows 0.040", which is the recommended distance for the infeed roller below the cutterhead.

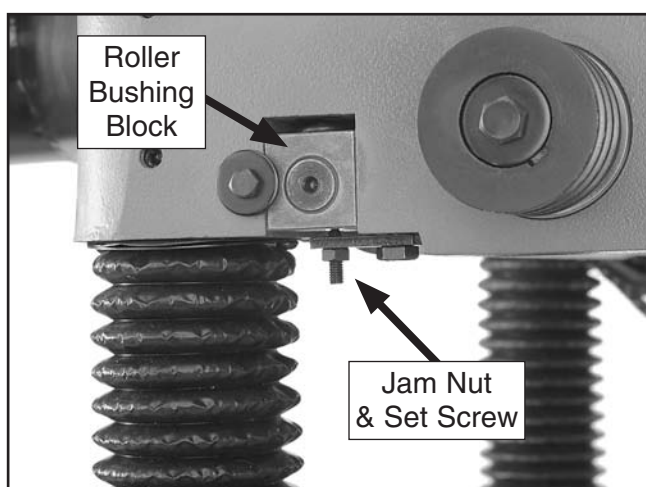


Figure 44. Infeed roller bushing block and height adjustment controls.

9. Repeat **Steps 7–8** on the left-hand side of the infeed roller.
10. Re-check both sides of the infeed roller and, if necessary, make further adjustments until the infeed roller height from side-to-side is 0.040" below the BDC of the cutterhead knife, then re-tighten both jam nuts.
11. Keeping the same zero reference on the Rotacator dial from **Step 5**, repeat **Steps 7–10** for the outfeed roller, but adjust it until it is 0.020" below the BDC of the cutterhead knife.

12. Use the same zero reference on the Rotacator dial from **Step 5**, perform similar steps as described above to adjust the height of the chip breaker to its recommended specification given at the beginning of this subsection. The adjustment controls are shown in **Figure 45**.

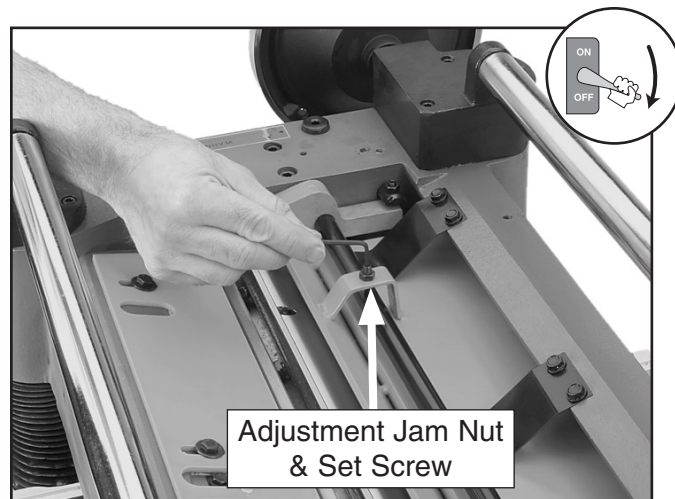


Figure 45. Adjusting the chip breaker height.

13. **Model G0454 Only:** Repeat **Step 12** for the pressure bar height adjustment. The adjustment controls are shown in **Figure 46**.



Figure 46. Adjusting the pressure bar height.

14. Re-install the belt cover, top cover, and the dust hood.

Using Wood Blocks

Tools Needed

	Qty
Hex Wrenches 3, 5mm.....	1 Each
Wrench or Socket 10mm.....	1
2x4 6' Long.....	1
Feeler Gauge Set.....	1

1. Build the wood blocks by cutting a *straight* 6' foot long 2x4 in half.

Note: *Having the wood blocks at an even height is critical to the accuracy of your overall adjustments. For best results, make the 2x4 square with a jointer and table saw before cutting it in half.*

2. Make sure the knives are set to the correct height (refer to **Setting/Replacing Knives** on **Page 36** for detailed instructions).
3. DISCONNECT PLANER FROM POWER!
4. Lower the bed rollers below the table surface (refer to **Bed Roller Height** on **Page 26** for detailed instructions).
5. Place the wood blocks along the sides of the table, as illustrated in **Figure 47**.

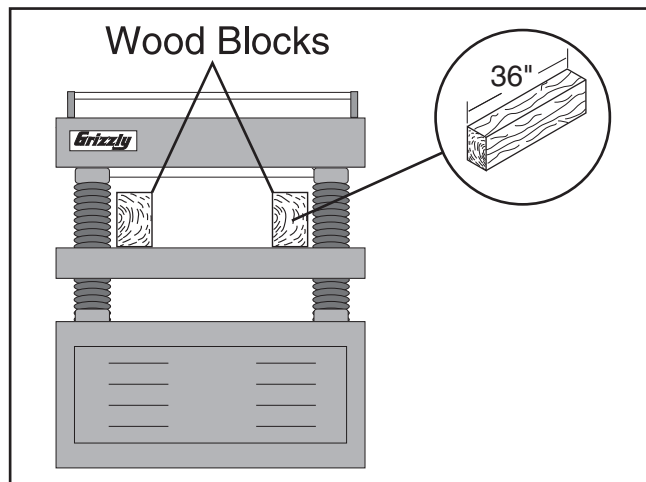


Figure 47. Wood blocks properly positioned on the planer table.

6. Remove the dust hood, top cover, and belt cover.
7. Use a feeler gauge to adjust the table until there is a 0.040" gap between the wood blocks and a cutterhead knife at BDC, which is the recommended distance for the infeed roller below the cutterhead knife.
8. Lock the table in place, as the wood blocks will now be your reference point.
9. Using the feeler gauges and the wood blocks instead of the Rotacator, perform **Steps 8–14** in the previous **Using a Rotacator** procedure to set the feed rollers, chip breaker, and the pressure bar to the correct distance below the cutterhead knives.

Note: *Keep in mind that you will have to repeat **Steps 7–8** above for each change in distance as specified on **Page 40**.*



Roller Spring Tension

The infeed and outfeed rollers keep the workpiece moving through the planer. There are springs that exert downward pressure on the rollers while still allowing them to raise with an uneven workpiece surface. Properly roller spring tension is crucial to keep the workpiece moving through the planer during operation.

Roller spring tension will vary depending upon the type of wood you are planing. When adjusting the roller spring tension keep the following in mind:

- If you are planing milled lumber with a relatively consistent surface, use less spring tension.
- If you are planing rough lumber with inconsistent surfaces, use greater spring tension to keep the stock moving through the planer.
- If the workpiece consistently stops feeding during operation, the roller spring tension may need to be increased.

Tools Needed	Qty
Hex Wrench 6mm.....	1

To adjust the roller spring tension to factory recommendations:

1. DISCONNECT PLANER FROM POWER!
2. Adjust tension cap screws #1–#3 so that they protrude $\frac{1}{8}$ " above the head casting, and adjust cap screw #4 so that it protrudes $\frac{5}{16}$ " above the head casting (see **Figure 48**).

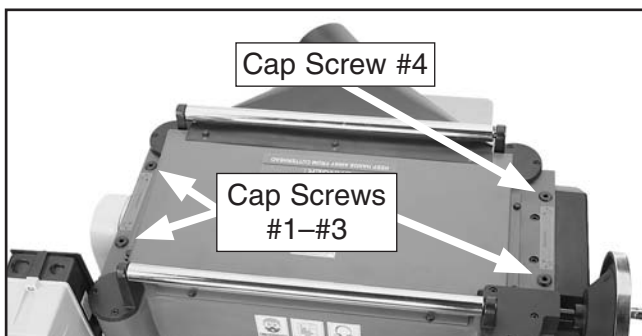


Figure 48. Roller spring tension adjustment cap screws.

Positioning Chip Deflector

Chip Deflector Gap Setting $\frac{1}{4}$ "

When properly distanced from the cutterhead, direct the chips into the dust hood, and keeps them from falling onto the outfeed roller and being pressed into the workpiece.

Tools Needed	Qty
Wrench or Socket 10mm.....	1
Fine Ruler or Calipers	1

To adjust the chip deflector gap:

1. DISCONNECT PLANER FROM POWER!
2. Remove the dust port, top cover, and belt cover.
3. Use the cutterhead pulley to rotate the cutterhead until a knife reaches the closest distance to the chip deflector (see **Figure 49**), then measure the distance between the knife and the chip deflector.

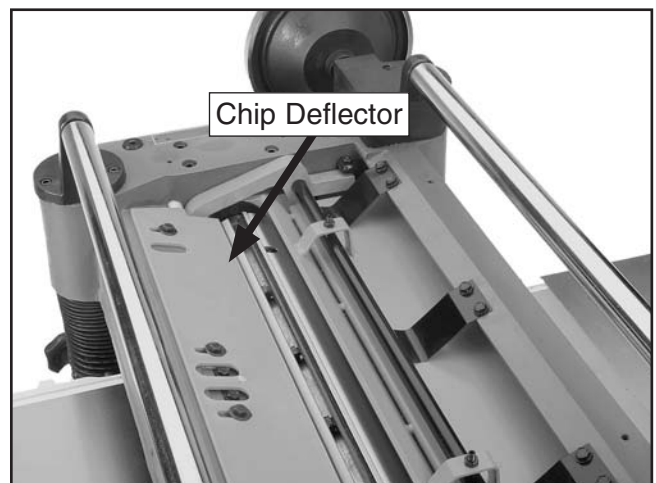


Figure 49. Chip deflector and securing hex bolts.



4. If the distance measured in **Step 3** is not equal to $\frac{1}{4}$ ", then loosen the four hex bolts that secure the chip deflector and adjust the gap to $\frac{1}{4}$ ".
5. Re-tighten the hex bolts, then replace the belt cover, top cover, and dust hood.

Scale Calibration

Although correctly set at the factory, the scale can be adjusted for accuracy if it becomes necessary.

Tools Needed	Qty
Phillips Screwdriver #2	1
Scrap Piece of Stock	1
Calipers	1

To re-position the scale:

1. Plane the scrap piece of stock until it is flat and of even thickness along its length.

Note: Turn the board over between each pass.

2. Use calipers to measure the board thickness.
3. If there is a discrepancy between the board thickness and the reading on the table height scale, loosen the two screws shown in **Figure 50**, adjust the scale in relation to the pointer, then re-tighten the screws.

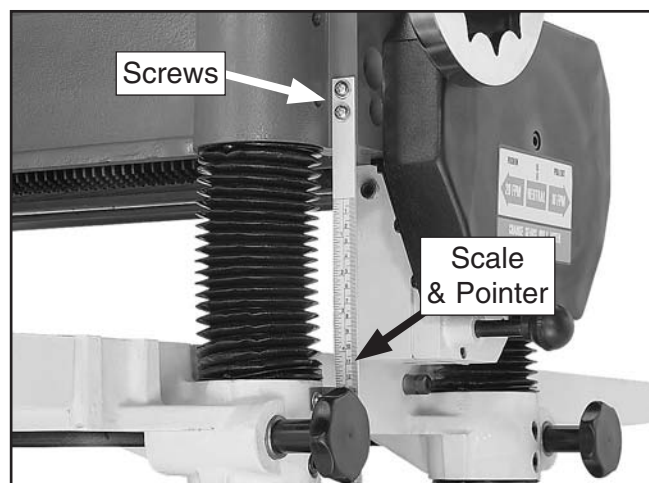


Figure 50. Table height scale.

Anti-Kickback Fingers

The anti-kickback fingers are an important safety feature of your planer. The fingers hang from a rod suspended across the head casting and in front of the infeed roller, as shown in **Figure 51**. This design allows the workpiece to easily enter the planer but reduces the risk of kickback by digging into the workpiece if it moves backward.

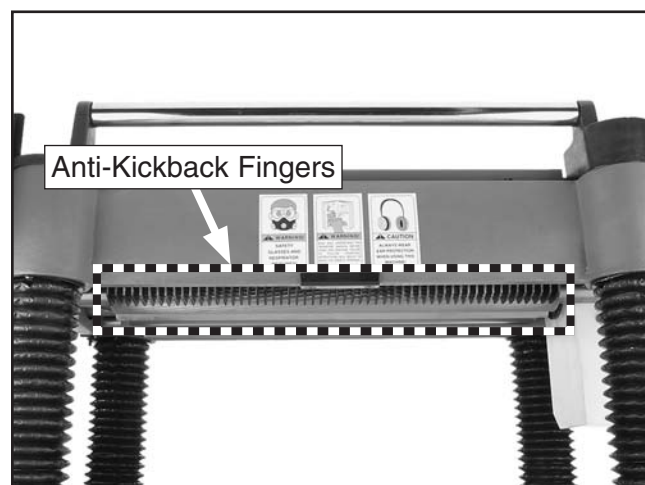


Figure 51. Anti-kickback fingers.

Check the anti-kickback fingers regularly to ensure they swing freely and easily. If the fingers do not swing freely and easily, first clean them with a wood resin solvent, then inspect them for damage. If any of the fingers are damaged, the device must be replaced before using the machine.

Do not apply oil or other lubricants to the anti-kickback fingers that will attract dust, and restrict the free movement of the fingers.

!WARNING

Proper operation of the anti-kickback fingers is critical for the safe operation of this planer. **DO NOT** operate the planer if the anti-kickback fingers are not operating correctly. Failure to heed this warning could result in serious personal injury.



Pulley Alignment

Proper pulley alignment prevents premature V-belt wear and unnecessary load on the motor. The pulleys are properly aligned when they are parallel and in the same plane as each other.

Tools Needed	Qty
Straightedge 3'	1
Hex Wrench 6mm.....	1
Wrenches or Sockets 14mm	1

To check/re-align pulleys:

1. DISCONNECT PLANER FROM POWER!
2. Remove both cabinet covers and the belt cover, then use the straightedge to check pulley alignment, as shown in **Figure 52**.



Figure 52. Checking pulley alignment.

—If the pulleys are not in the same plane, loosen the cap screw or hex bolt securing the pulley to the shaft, then adjust the pulleys in or out until they are aligned.

—If the pulleys are not parallel, loosen the four motor mount hex nuts, then rotate the motor on its mount until the pulleys are parallel.

3. Re-check the pulleys and repeat **Step 2** if necessary.
4. When you are satisfied with the pulley alignment, re-tighten all fasteners, then replace the belt cover and cabinet covers.



SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.

WARNING

Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved after-market parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.















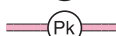
CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

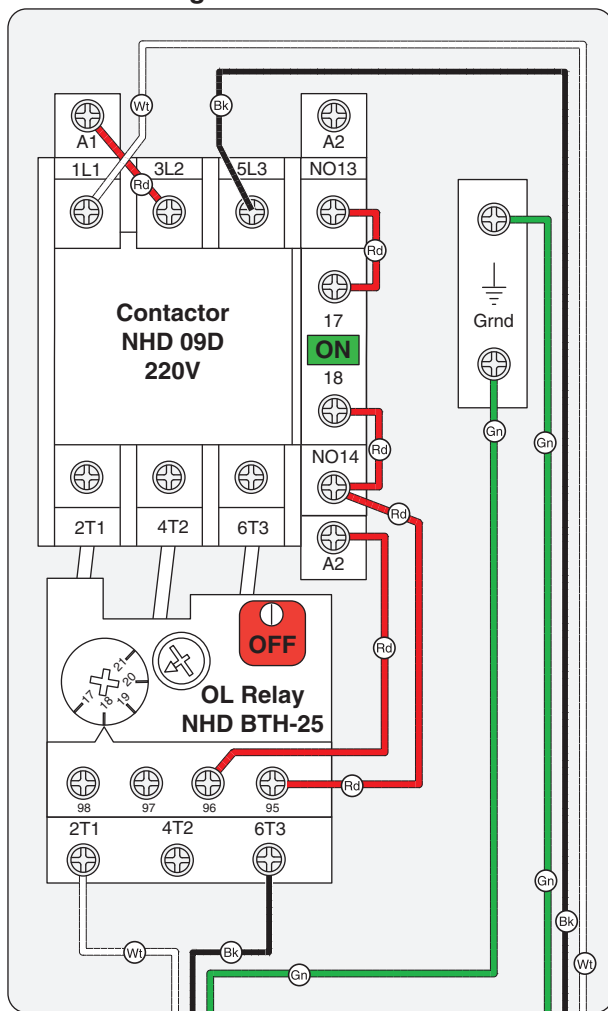
COLOR KEY

BLACK		BLUE		YELLOW		LIGHT BLUE	
WHITE		BROWN		YELLOW GREEN		BLUE WHITE	
GREEN		GRAY		PURPLE		TURQUOISE	
RED		ORANGE		PINK			



G0453 Wiring Diagram

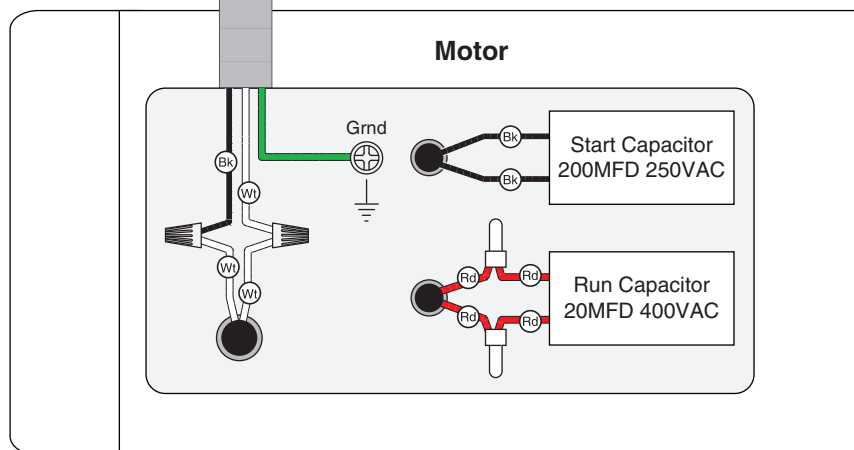
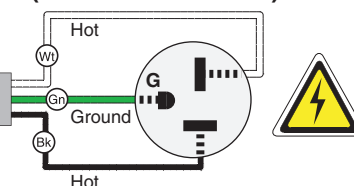
Magnetic ON/OFF Switch



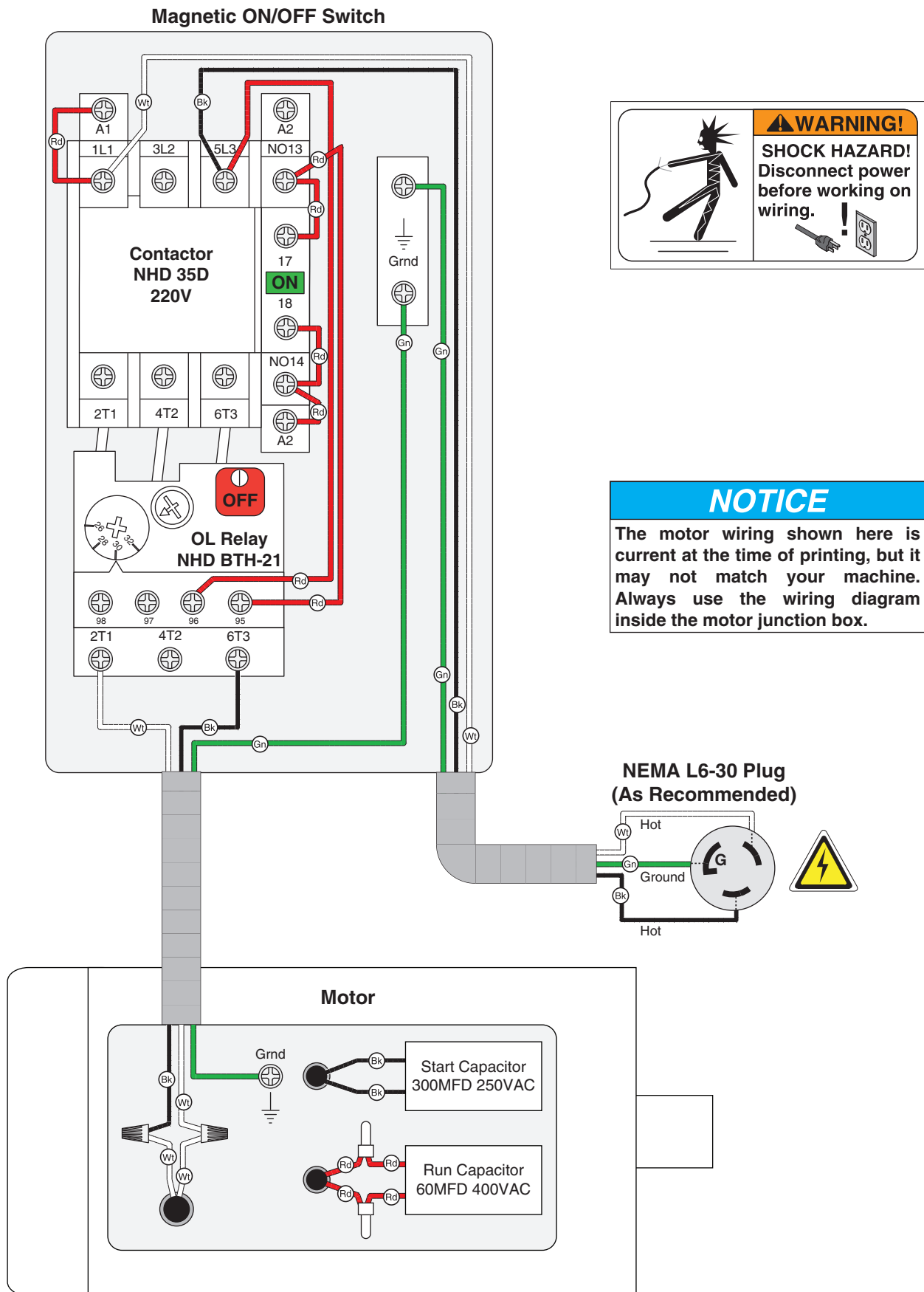
NOTICE

The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.

NEMA 6-20 Plug (As Recommended)

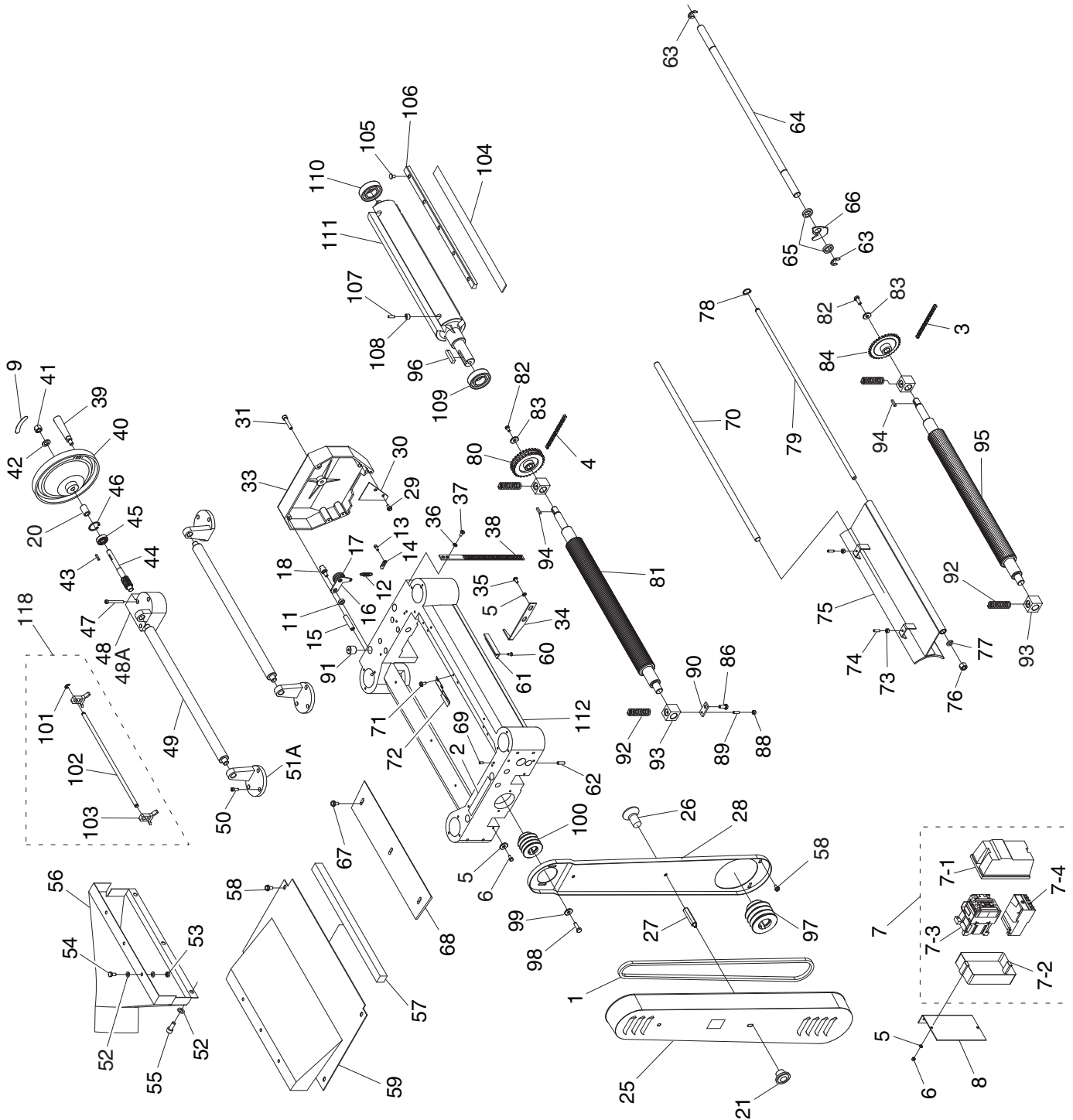


G0454 Wiring Diagram



SECTION 9: PARTS

G0453 Headstock Breakdown



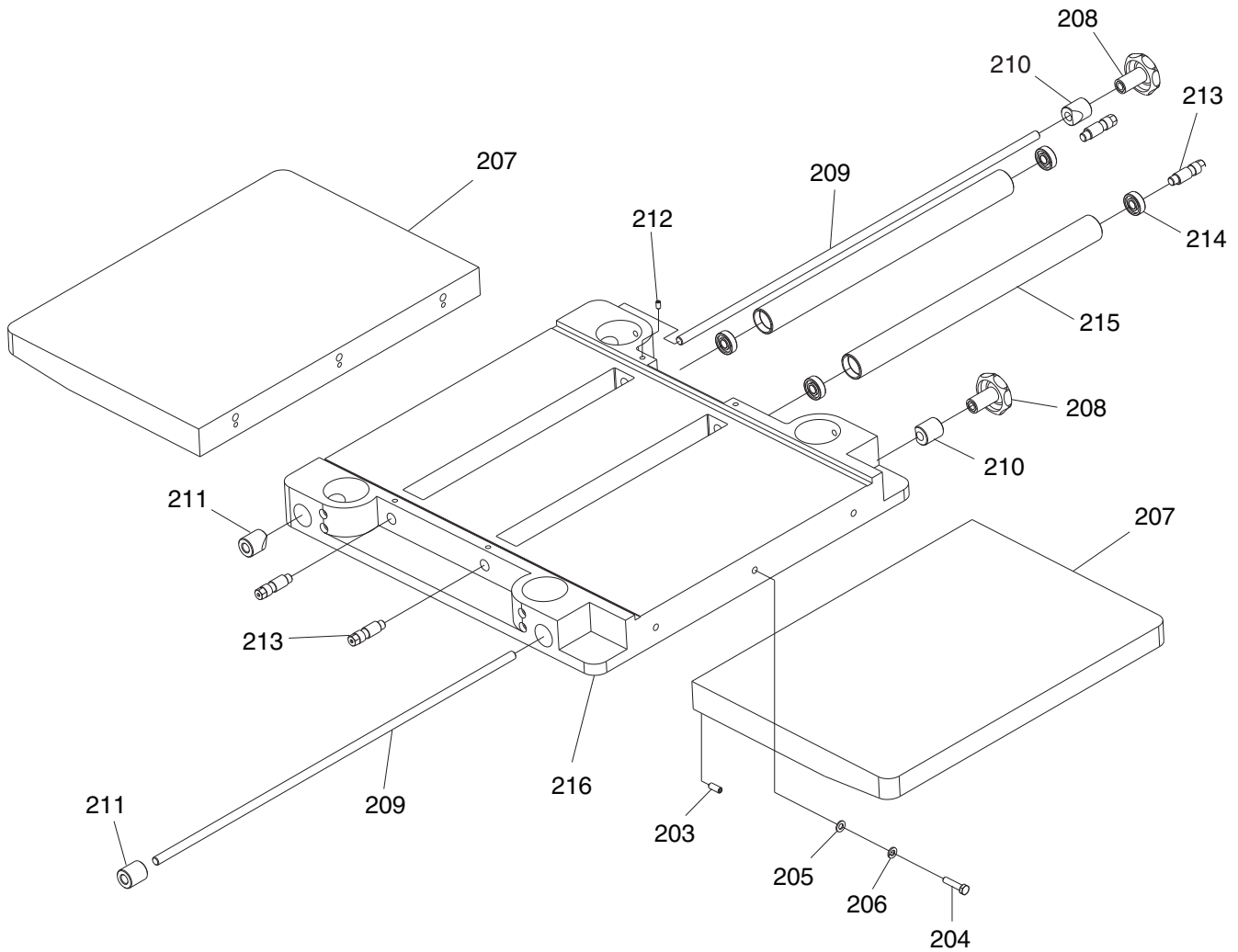
G0453 Headstock Parts List

REF	PART #	DESCRIPTION
1	PVMX60	COGGED V-BELT MX-60
2	P0453002	OIL FILL LABEL
3	P0453003	CHAIN 06B-1 X 49 31LINKS
4	P0453004	CHAIN 06B-1 X 63 24LINKS
5	PW03M	FLAT WASHER 6MM
6	PSB26M	CAP SCREW M6-1 X 12
7	P0453007	MAGNETIC SWITCH ASSEMBLY
7-1	P0453007-1	MAGNETIC SWITCH COVER
7-2	P0453007-2	MAGNETIC SWITCH BACK
7-3	P0453007-3	CONTACTOR NHD 09D 220V
7-4	P0453007-4	OL RELAY NHD BTH-21 17-21A
8	P0453008	MAGNETIC SWITCH PLATE
9	P0453009	HANDWHEEL LABEL
11	P0453011	COLLAR
12	P0453012	EXTENSION SPRING
13	PSS13M	SET SCREW M10-1.5 X 12
14	P0453014	HANGER
15	P0453015	SHAFT
16	P0453016	BRACKET
17	P0453017	IDLER PULLEY
18	P0453018	IDLER SHAFT
20	P0453020	COLLAR
21	P0453021	STAR KNOB M8-1.25
25	P0453025	BELT COVER
26	PFH02M	FLAT HD SCR M6-1 X 12
27	P0453027	SPECIAL BOLT
28	P0453028	BELT GUARD
29	PFB09M	FLANGE BOLT M6-1 X 10
30	P0453030	SAFETY HATCH
31	PSB45M	CAP SCREW M8-1.25 X 45
33	P0453033	CHAIN DRIVE COVER
34	P0453034	POINTER
35	PS68M	PHLP HD SCR M6-1 X 10
36	PW03M	FLAT WASHER 6MM
37	PS14M	PHLP HD SCR M6-1 X 12
38	P0453038	SCALE
39	P0453039	HANDLE
40	P0453040	HANDWHEEL
41	PN09M	HEX NUT M12-1.75
42	PW06M	FLAT WASHER 12MM
43	PK48M	KEY 4 X 4 X 20
44	P0453044	WORM GEAR
45	P6201	BALL BEARING 6201ZZ
46	PR29M	INT RETAINING RING 32MM
47	PSB137M	CAP SCREW M5-.8 X 55
48	P0453048	WORM HOUSING
48A	P0453048A	WORM HOUSING ASSEMBLY
49	P0453049	RETURN ROLLER
50	PSB20M	CAP SCREW M5-.8 X 14
51A	P0453051A	ROLLER STAND 3.505" V2.01.08
52	PW03M	FLAT WASHER 6MM
53	PN01M	HEX NUT M6-1
54	PB04M	HEX BOLT M6-1 X 10
55	PB09M	HEX BOLT M8-1.25 X 20
56	P0453056	DUST HOOD

REF	PART #	DESCRIPTION
57	P0453057	FOAM PIECE
58	PFB09M	FLANGE BOLT M6-1 X 10
59	P0453059	TOP COVER
60	PFH04M	FLAT HD SCR M6-1 X 8
61	P0453061	CUT LIMIT PLATE
62	PSS06M	SET SCREW M8-1.25 X 16
63	PEC05M	E-CLIP 15MM
64	P0453064	ANTI-KICKBACK ROD
65	P0453065	COLLAR
66	P0453066	ANTI-KICKBACK FINGER
67	PFB10M	FLANGE BOLT M6-1 X 15
68	P0453068	CHIP DEFLECTOR
69	PSS25M	SET SCREW M6-1 X 20
70	P0453070	SHAFT
71	PFB01M	FLANGE BOLT M6-1 X 12
72	P0453072	HOLDDOWN PLATE
73	PN01M	HEX NUT M6-1
74	PSS58M	SET SCREW M6-1 X 18
75	P0453075	CHIP BREAKER
76	PN09M	HEX NUT M12-1.75
77	PLW05M	LOCK WASHER 12MM
78	PR03M	EXT RETAINING RING 12MM
79	P0453079	LOCKING ROD
80	P0453080	OUTFEED ROLLER SPROCKET
81	P0453081	OUTFEED ROLLER
82	PB83M	HEX BOLT M6-1 X 16
83	PW03M	FLAT WASHER 6MM
84	P0453084	INFEED ROLLER SPROCKET
86	PB03M	HEX BOLT M8-1.25 X 16
88	PN06M	HEX NUT M5-.8
89	PSS53M	SET SCREW M5-.8 X 12
90	P0453090	PLATE
91	P0453091	SPECIAL OILER SET SCREW
92	P0453092	COMPRESSION SPRING
93	P0453093	ROLLER BUSHING BLOCK
94	PK08M	KEY 5 X 5 X 16
95	P0453095	INFEED ROLLER
96	PK09M	KEY 8 X 8 X 35
97	P0453097	MOTOR PULLEY 60HZ
98	PB09M	HEX BOLT M8-1.25 X 20
99	P0453099	COLLAR
100	P0453100	CUTTERHEAD PULLEY 60HZ
101	PEC015M	E-CLIP 8MM
102	P0453102	KNIFE GAUGE SHAFT
103	P0453103	KNIFE GAUGE FOOT
104	P0453104	KNIFE (SET OF 3)
105	P0453105	GIB SCREW
106	P0453106	GIB
107	PSB24M	CAP SCREW M5-.8 X 16
108	P0453108	ADJUSTING NUT
109	P6205	BALL BEARING 6205ZZ
110	P6204	BALL BEARING 6204ZZ
111	P0453111	CUTTERHEAD
112	P0453112	HEAD CASTING
118	P0453118	KNIFE GAUGE ASSEMBLY



G0453 Table Breakdown

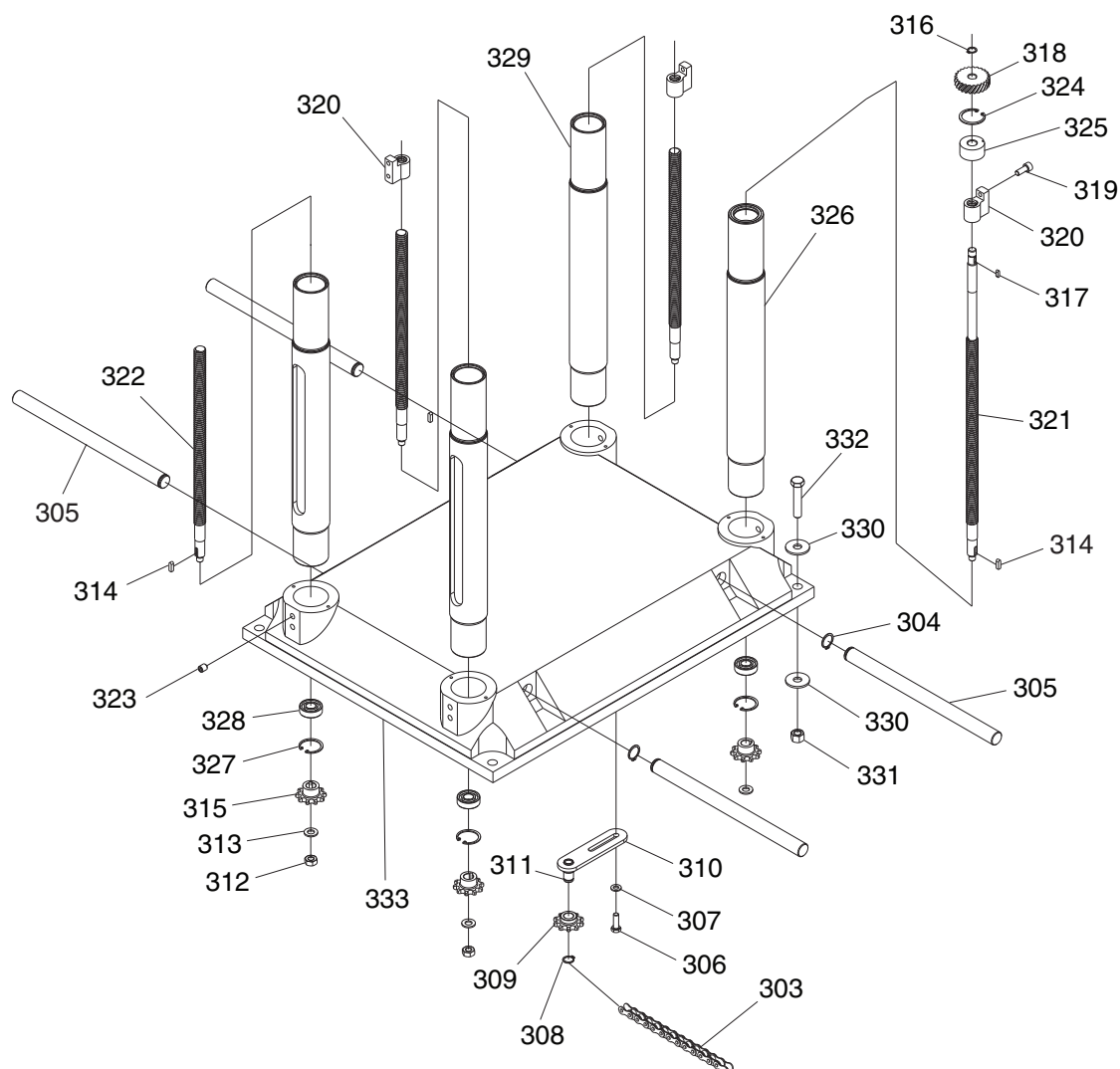


REF	PART #	DESCRIPTION
203	PSS09M	SET SCREW M8-1.25 X 20
204	PB26M	HEX BOLT M8-1.25 X 30
205	PW01M	FLAT WASHER 8MM
206	PLW04M	LOCK WASHER 8MM
207	P0453207	TABLE EXTENSION WING
208	P0453208	STAR KNOB M12-1.75
209	P0453209	LOCK BOLT

REF	PART #	DESCRIPTION
210	P0453210	GIB
211	P0453211	WEDGE DOG
212	PSS11M	SET SCREW M6-1 X 16
213	P0453213	ECCENTRIC SHAFT
214	G3845	BALL BEARING 608ZZ
215	P0453215	BED ROLLER
216	P0453216	MAIN TABLE



G0453 Columns Breakdown



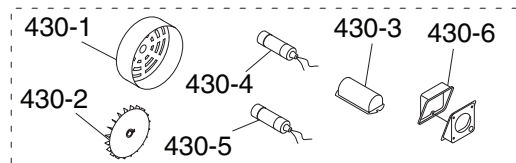
REF	PART #	DESCRIPTION
303	P0453303	CHAIN 12.7 AX 134
304	PR05M	EXT RETAINING RING 15MM
305	P0453305	LIFTING BAR
306	PB09M	HEX BOLT M8-1.25 X 20
307	PW01M	FLAT WASHER 8MM
308	PR05M	EXT RETAINING RING 15MM
309	P0453309	SPROCKET
310	P0453310	BRACKET
311	P0453311	SHAFT
312	PN02M	HEX NUT M10-1.5
313	PW04M	FLAT WASHER 10MM
314	PK08M	KEY 5 X 5 X 16
315	P0453315	SPROCKET
316	PR03M	EXT RETAINING RING 12MM
317	PK69M	KEY 4 X 4 X 12
318	P0453318	GEAR

REF	PART #	DESCRIPTION
319	PSB02M	CAP SCREW M6-1 X 20
320	P0453320	LEADSCREW NUT
321	P0453321	PRIMARY LEADSCREW
322	P0453322	SECONDARY LEADSCREW
323	PSS13M	SET SCREW M10-1.5 X 12
324	PR23M	INT RETAINING RING 40MM
325	P0453325	BUSHING
326	P0453326	PRIMARY COLUMN
327	PR24M	INT RETAINING RING 42MM
328	P6302	BALL BEARING 6302
329	P0453329	SECONDARY COLUMN
330	PW06M	FLAT WASHER 12MM
331	PN09M	HEX NUT M12-1.75
332	PB24M	HEX BOLT M12-1.75 X 45
333	P0453333	BASE

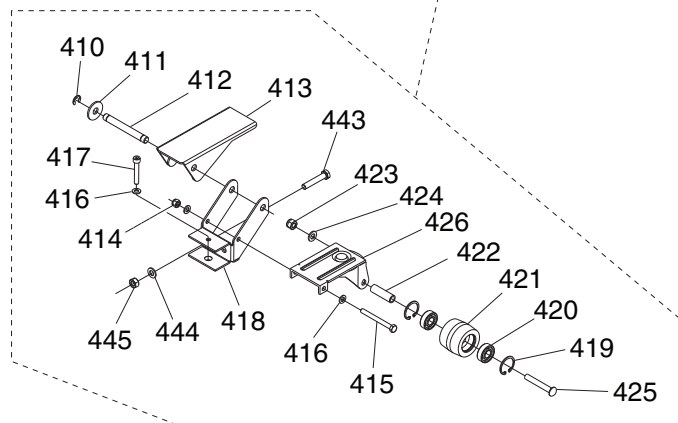
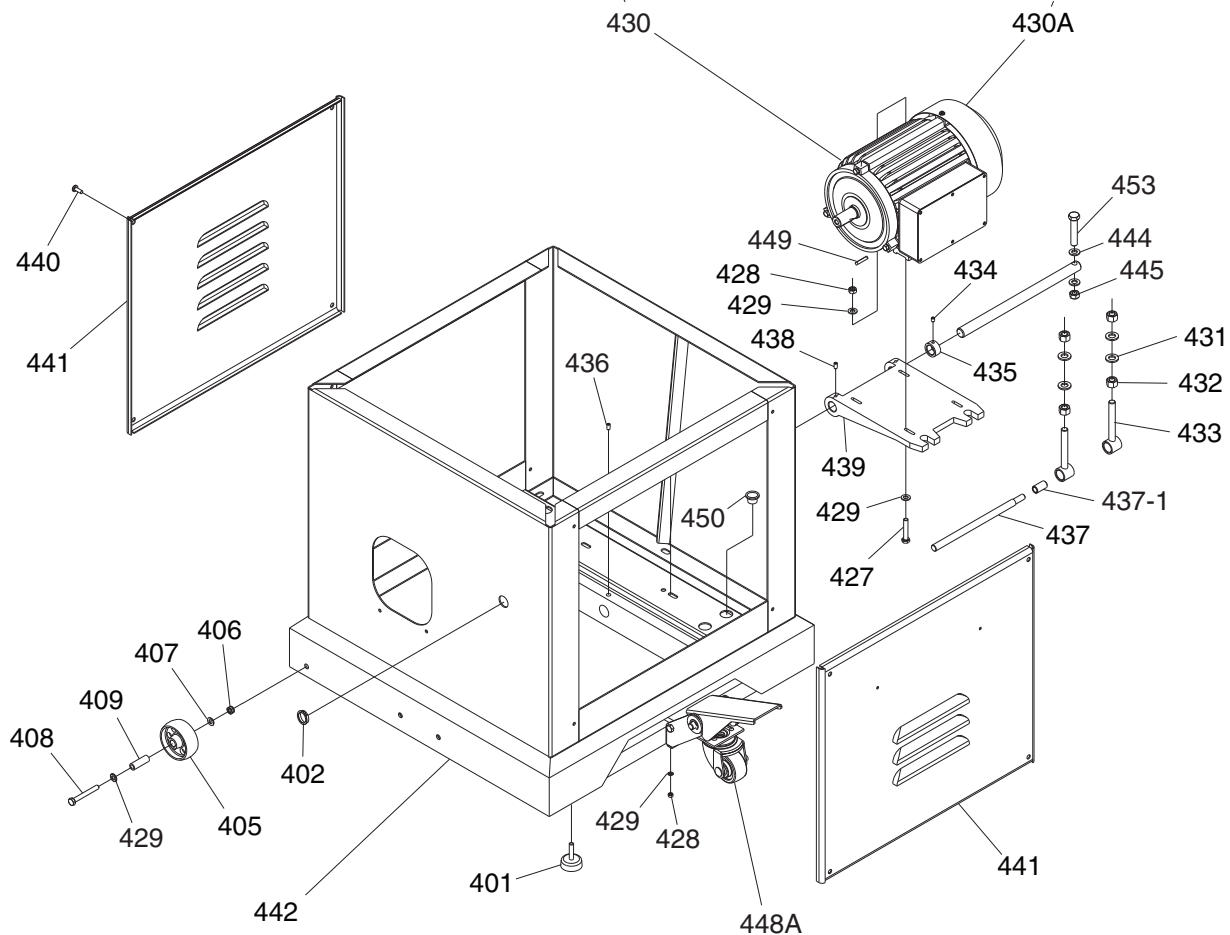
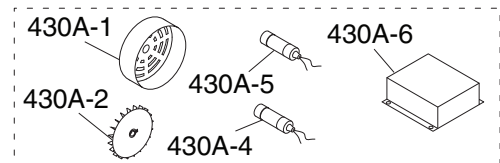


G0453 Cabinet Stand Breakdown

For Machine Manufacture Date
Prior to 03/08



For Machine Manufacture Date
of 03/08 or After



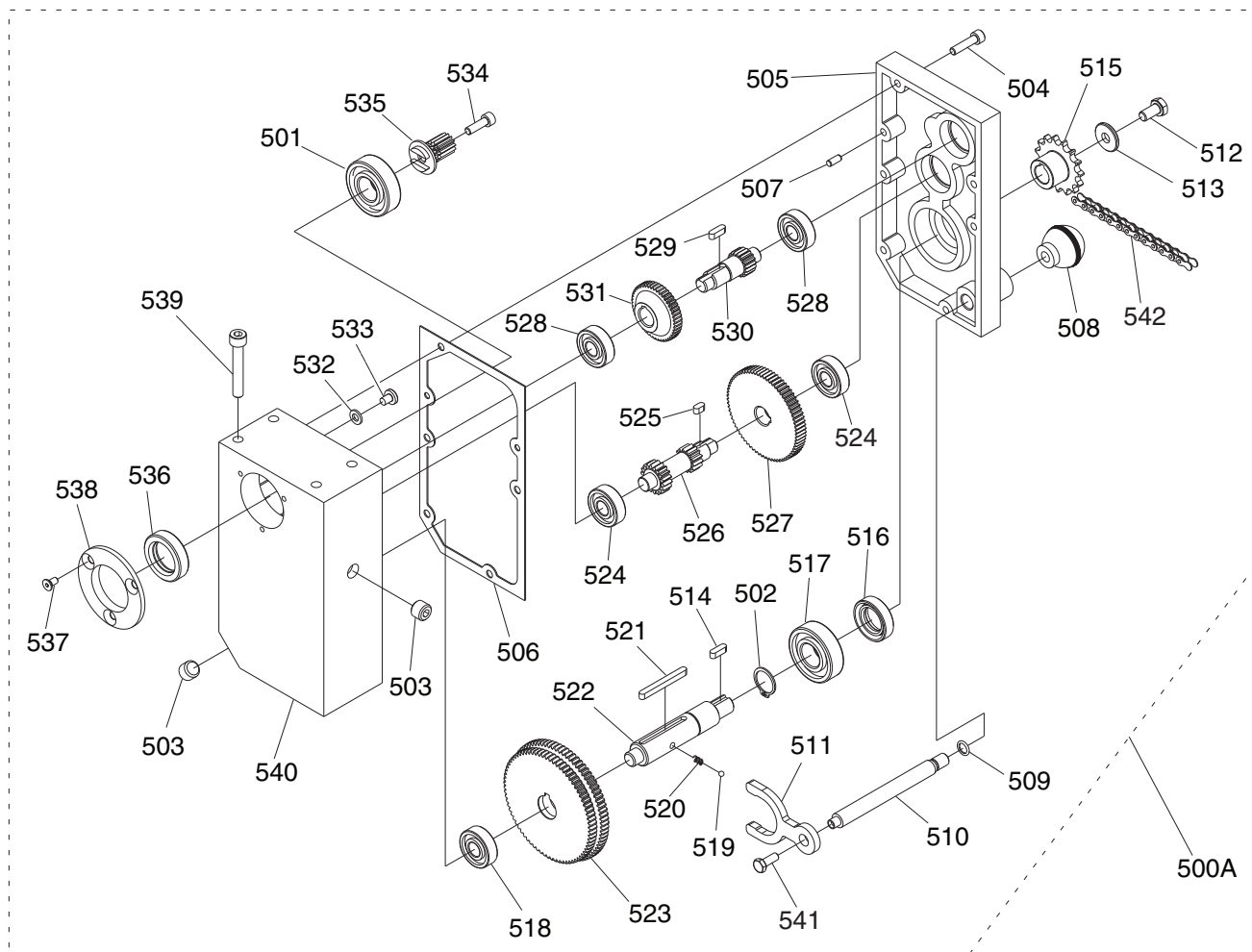
G0453 Cabinet Stand Parts List

REF	PART #	DESCRIPTION
401	P0453401	RUBBER FOOT
402	P0453402	RELIEF BUSHING
405	P0453405	UNIVERSAL WHEEL
406	PN03M	HEX NUT M8-1.25
407	PW01M	FLAT WASHER 8MM
408	PB86M	HEX BOLT M8-1.25 X 65
409	P0453409	SLEEVE
410	PR16M	EXT RETAINING RING 9MM
411	PW06M	FLAT WASHER 12MM
412	P0453412	SHAFT 12MM
413	P0453413	PEDAL
414	PN03M	HEX NUT M8-1.25
415	PB45M	HEX BOLT M8-1.25 X 100
416	PW01M	FLAT WASHER 8MM
417	PB22M	HEX BOLT M8-1.25 X 50
418	P0453418	BRACKET
419	PR21M	INT RETAINING RING 35MM
420	P6206-2RS	BALL BEARING 6206 2RS
421	P0453421	TROLLEY WHEEL
422	P0453422	SLEEVE
423	PLN09M	LOCK NUT M12-1.75
424	PW06M	FLAT WASHER 12MM
425	P0453425	SPECIAL BOLT
426	P0453426	TROLLEY UNIVERSAL KIT
427	PB118M	HEX BOLT M8-1.25 X 45
428	PN03M	HEX NUT M8-1.25
429	PW01M	FLAT WASHER 8MM
430	P0453430	MOTOR 3HP 220V 1PH V1.02.06
430-1	P0453430-1	MOTOR FAN COVER V1.02.06
430-2	P0453430-2	MOTOR FAN V1.02.06

REF	PART #	DESCRIPTION
430-3	P0453430-3	CAPACITOR COVER
430-4	P0453430-4	RUN CAPACITOR 20UF 250VAC
430-5	P0453430-5	START CAPACITOR 500UF 125VAC
430-6	P0453430-6	JUNCTION BOX V1.02.06
430A	P0453430A	MOTOR 3HP 220V 1PH V2.03.08
430A-1	P0453430A-1	MOTOR FAN COVER V2.03.08
430A-2	P0453430A-2	MOTOR FAN V2.03.08
430A-4	P0453430A-4	R CAPACITOR 20M 400V V2.03.08
430A-5	P0453430A-5	S CAPACITOR 200M 250V V2.03.08
430A-6	P0453430A-6	JUNCTION BOX V2.03.08
431	PW06M	FLAT WASHER 12MM
432	PN09M	HEX NUT M12-1.75
433	P0453433	ADJUST BOLT
434	PSS03M	SET SCREW M6-1 X 8
435	P0453435	COLLAR
436	PSS14M	SET SCREW M8-1.25 X 12
437	P0453437	PLATE CONNECTING ROD
437-1	P0453437-1	BUSHING
438	PSS04M	SET SCREW M6-1 X 12
439	P0453439	MOTOR PLATE
440	PFH06M	FLAT HD SCR M6-1 X 20
441	P0453441	CABINET COVER
442	P0453442	CABINET STAND
443	PB143M	HEX BOLT M12-1.75 X 120
444	PW04M	FLAT WASHER 10MM
445	PN02M	HEX NUT M10-1.5
448A	P0453448A	FOOT PEDAL ASSEMBLY
449	P0453449	KEY 5 X 5 X 30
450	P0453450	BALL STRAIN RELIEF
453	PB160M	HEX BOLT M10-1.5 X 70



G0453 Gearbox Breakdown

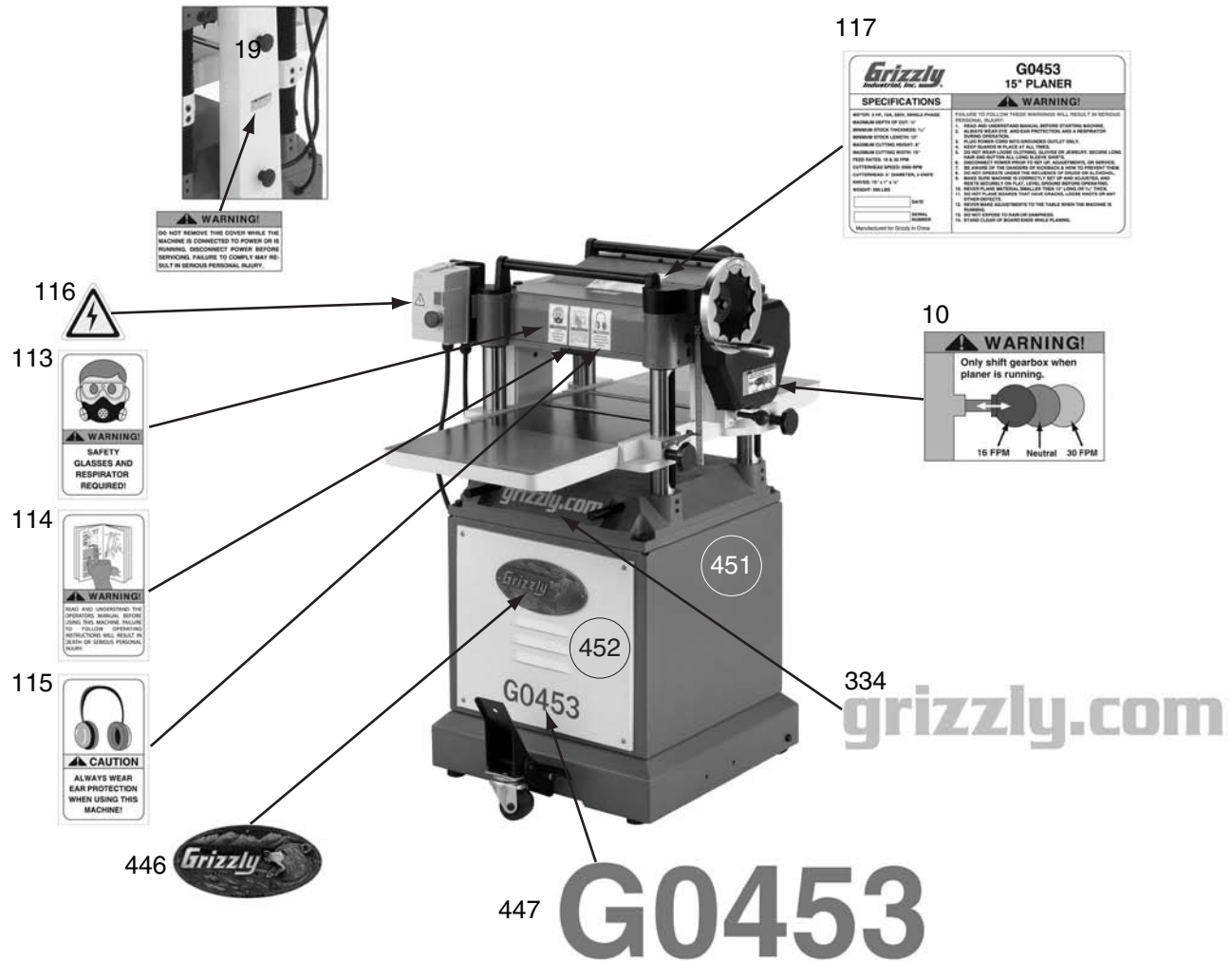


REF	PART #	DESCRIPTION
500A	P0454500A	GEARBOX ASSEMBLY
501	P6204	BALL BEARING 6204ZZ
502	PR09M	EXT RETAINING RING 20MM
503	P0453503	OIL PLUG
504	PSB06M	CAP SCREW M6-1 X 25
505	P0453505	GEARBOX BASE
506	P0453506	GASKET
507	P0453507	PIN 5 X 10
508	P0453508	BALL KNOB M10-1.5
509	PORP016	O-RING 15.8 X 2.4 P16
510	P0453510	HANDLE SHAFT
511	P0453511	SHIFTING FORK
512	PB03M	HEX BOLT M8-1.25 X 16
513	PW01M	FLAT WASHER 8MM
514	PK08M	KEY 5 X 5 X 16
515	P0453515	SPROCKET
516	P0453516	OIL SEAL 20 X 35 X 7
517	P6204	BALL BEARING 6204ZZ
518	P6201	BALL BEARING 6201ZZ
519	P0453519	STEEL BALL 4MM
520	P0453520	COMPRESSION SPRING
521	PK36M	KEY 5 X 5 X 50

REF	PART #	DESCRIPTION
522	P0453522	SHAFT
523	P0453523	GEAR
524	P6201	BALL BEARING 6201ZZ
525	PK06M	KEY 5 X 5 X 10
526	P0453526	GEAR SHAFT
527	P0453527	GEAR
528	P6201	BALL BEARING 6201ZZ
529	PK19M	KEY 5 X 5 X 14
530	P0453530	GEAR SHAFT
531	P0453531	GEAR
532	PW03M	FLAT WASHER 6MM
533	PS03M	PHLP HD SCR M6-1 X 8
534	PSS25M	SET SCREW M6-1 X 20
535	P0453535	GEAR 14T
536	P0453536	OIL SEAL 25 X 40 X 10
537	PSB33M	CAP SCREW M5-.8 X 12
538	P0453538	FLANGE COVER
539	PSB05M	CAP SCREW M8-1.25 X 50
540	P0453540	GEARBOX COVER
541	PFB01M	FLANGE BOLT M6-1 X 12
542	P0453542	CHAIN 06B-1 X 49



G0453 Label Placement



REF	PART #	DESCRIPTION
10	P0453010	SPEED CHANGE LABEL
19	P0453019	BELT COVER LABEL
113	PLABEL-37	RESPIRATOR/GLASSES LABEL VL
114	PLABEL-12	READ MANUAL LABEL VL
115	PLABEL-15	EAR PROTECTION LABEL VL
116	PLABEL-14	ELECTRICITY LABEL

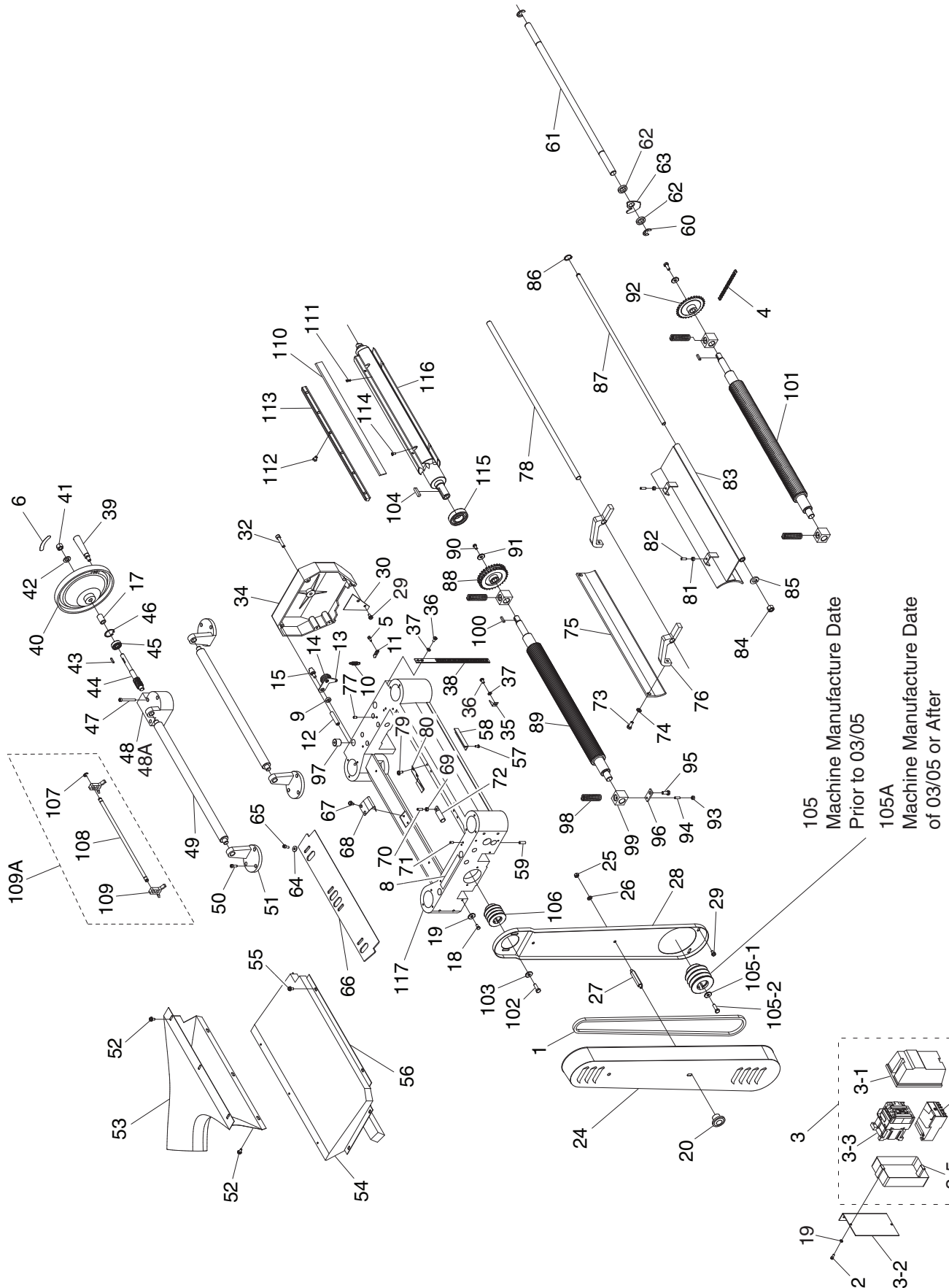
REF	PART #	DESCRIPTION
117	P0453117	MACHINE ID LABEL
334	P0453334	GRIZZLY.COM LABEL
446	G8588	GRIZZLY NAMEPLATE
447	P0453447	MODEL NUMBER LABEL
451	PPAINT-1	GRIZZLY GREEN TOUCH UP PAINT
452	PPAINT-11	GRIZZLY PUTTY TOUCH UP PAINT

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.



G0454 Headstock Breakdown



G0454 Headstock Parts List

REF	PART #	DESCRIPTION
1	PVMX60	COGGED V-BELT MX-60
2	PSB26M	CAP SCREW M6-1 X 12
3	P0454003	MAG SWITCH ASSEMBLY
3-1	P0454003-1	MAG SWITCH COVER
3-2	P0454003-2	SWITCH BRACKET
3-3	P0454003-3	CONTACTOR NHD 35D 220V
3-4	P0454003-4	OL RELAY NHD BTH-25 26-32A
3-5	P0454003-5	MAG SWITCH BACK
4	P0454004	CHAIN 06B-1 X 67
5	PSB04M	CAP SCREW M6-1 X 10
6	P0453009	HANDWHEEL LABEL
8	P0454008	OIL LEVEL LABEL
9	P0453011	COLLAR
10	P0453012	EXTENSION SPRING
11	P0453014	HANGER
12	P0453015	SHAFT
13	P0453016	BRACKET
14	P0453017	IDLER PULLEY
15	P0453018	IDLER SHAFT
17	P0453020	COLLAR
18	PB02M	HEX BOLT M6-1 X 12
19	PW03M	FLAT WASHER 6MM
20	P0453021	STAR KNOB M8-1.25
24	P0453025	BELT COVER
25	PN03M	HEX NUT M8-1.25
26	PW01M	FLAT WASHER 8MM
27	P0453027	SPECIAL BOLT
28	P0453028	BELT GUARD
29	PFB09M	FLANGE BOLT M6-1 X 10
30	P0454030	SAFETY HATCH
32	PSB12M	CAP SCREW M8-1.25 X 40
34	P0454034	CHAIN DRIVE COVER
35	P0453034	POINTER
36	PS14M	PHLP HD SCR M6-1 X 12
37	PW03M	FLAT WASHER 6MM
38	P0453038	SCALE
39	P0453039	HANDLE
40	P0453040	HANDWHEEL
41	PN09M	HEX NUT M12-1.75
42	PW06M	FLAT WASHER 12MM
43	PK48M	KEY 4 X 4 X 20
44	P0453044	WORM GEAR
45	P6201	BALL BEARING 6201ZZ
46	PR29M	INT RETAINING RING 32MM
47	PSB83M	CAP SCREW M6-1 X 55

REF	PART #	DESCRIPTION
48	P0454048	WORM HOUSING
48A	P0454048A	WORM HOUSING ASSEMBLY
49	P0454049	RETURN ROLLER
50	PSB01M	CAP SCREW M6-1 X 16
51	P0454051	ROLLER STAND
52	PFB01M	FLANGE BOLT M6-1 X 12
53	P0454053	DUST HOOD
54	P0454054	SPONGE GASKET
55	PFB01M	FLANGE BOLT M6-1 X 12
56	P0454056	TOP COVER
57	PB107M	HEX BOLT M5-.8 X 12
58	P0453061	CUT LIMIT PLATE
59	PSS14M	SET SCREW M8-1.25 X 12
60	PEC05M	E-CLIP 15MM
61	P0454061	SHAFT
62	P0453065	COLLAR
63	P0453066	ANTI-KICKBACK FINGER
64	PW03M	FLAT WASHER 6MM
65	PB02M	HEX BOLT M6-1 X 12
66	P0454066	CHIP DEFLECTOR PLATE
67	PFB01M	FLANGE BOLT M6-1 X 12
68	P0454068	HOLDDOWN PLATE
69	PN01M	HEX NUT M6-1
70	PSS25M	SET SCREW M6-1 X 20
71	PSS04M	SET SCREW M6-1 X 12
72	P0454072	ADJUSTING SHAFT
73	PB09M	HEX BOLT M8-1.25 X 20
74	PLW04M	LOCK WASHER 8MM
75	P0454075	PRESSURE BAR
76	P0454076	BRACKET
77	PSS11M	SET SCREW M6-1 X 16
78	P0454078	SHAFT
79	PFB01M	FLANGE BOLT M6-1 X 12
80	P0454080	PLATE SPRING
81	PN01M	HEX NUT M6-1
82	PSS25M	SET SCREW M6-1 X 20
83	P0454083	CHIP BREAKER
84	PN09M	HEX NUT M12-1.75
85	PLW05M	LOCK WASHER 12MM
86	PR03M	EXT RETAINING RING 12MM
87	P0454087	LOCKING ROD
88	P0454088	SPROCKET
89	P0454089	OUTFEED ROLLER
90	PB83M	HEX BOLT M6-1 X 16
91	PW03M	FLAT WASHER 6MM



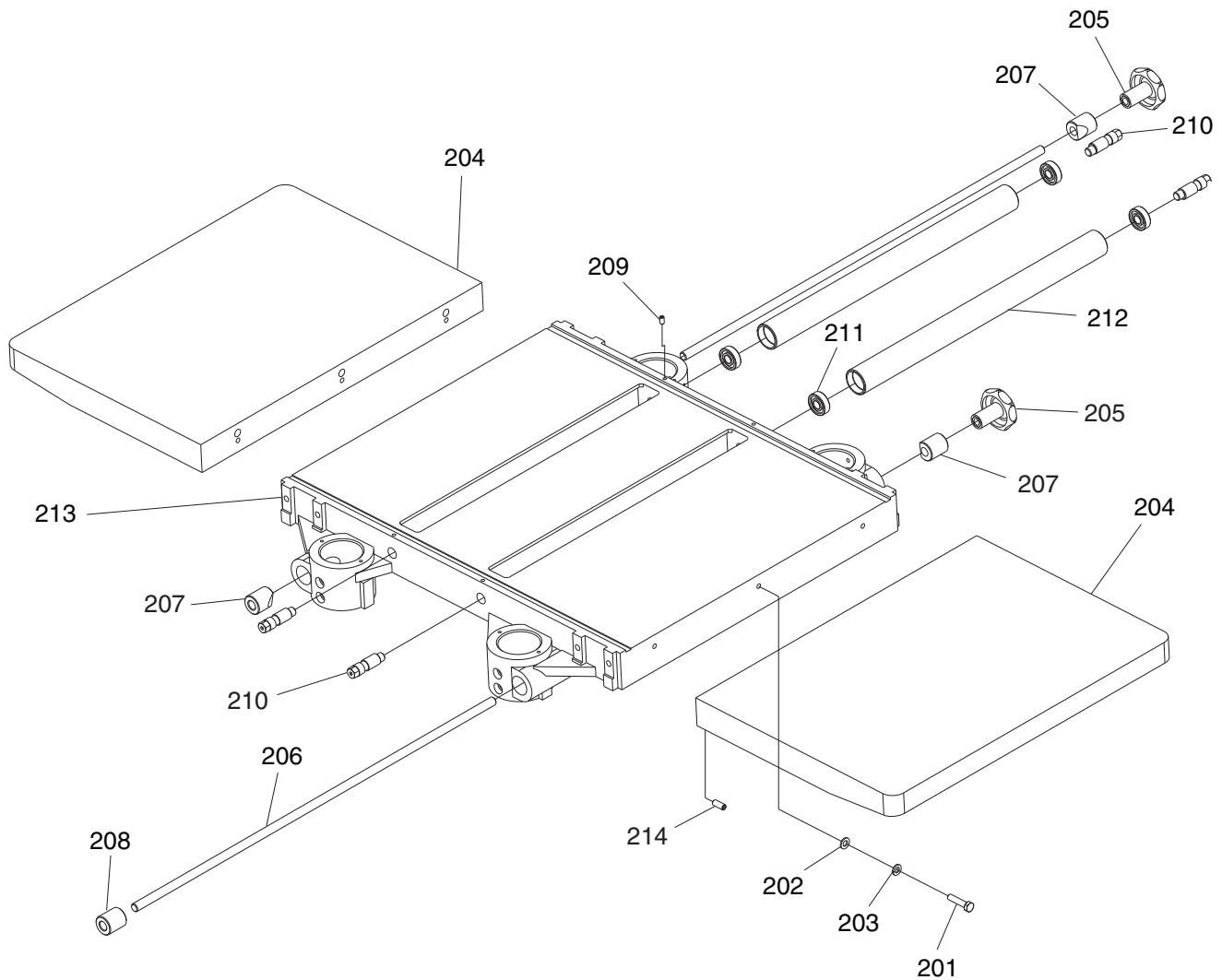
G0454 Headstock Parts List

REF	PART #	DESCRIPTION
92	P0454092	SPROCKET
93	PN01M	HEX NUT M6-1
94	PSS25M	SET SCREW M6-1 X 20
95	PB09M	HEX BOLT M8-1.25 X 20
96	P0454096	PLATE
97	P0453091	SPECIAL OILER SET SCREW
98	P0453092	COMPRESSION SPRING
99	P0454099	BUSHING BLOCK
100	PK01M	KEY 5 X 5 X 22
101	P0454101	INFEED ROLLER
102	PB07M	HEX BOLT M8-1.25 X 25
103	PW01M	FLAT WASHER 8MM
104	PK09M	KEY 8 X 8 X 35
105	P0454105	MOTOR PULLEY V1.03.05
105-1	P0454105-1	SPECIAL WASHER

REF	PART #	DESCRIPTION
105-2	P0454105-2	TAPERED HEAD SCREW
105A	P0454105A	MOTOR PULLEY V2.09.07
106	P0453100	CUTTERHEAD PULLEY 60HZ
107	PEC015M	E-CLIP 8MM
108	P0454108	KNIFE GAUGE SHAFT
109	P0454109	KNIFE GAUGE FOOT
109A	P0454109A	KNIFE GAUGE ASSEMBLY
110	P0454110	KNIFE (SET OF 4)
111	P0454111	COMPRESSION SPRING
112	P0454112	GIB SCREW
113	P0454113	GIB
114	P0454114	JACK SCREW M5-.8 X 12
115	P6206	BALL BEARING 6206ZZ
116	P0454116	CUTTERHEAD
117	P0454117	HEAD CASTING



G0454 Table Breakdown

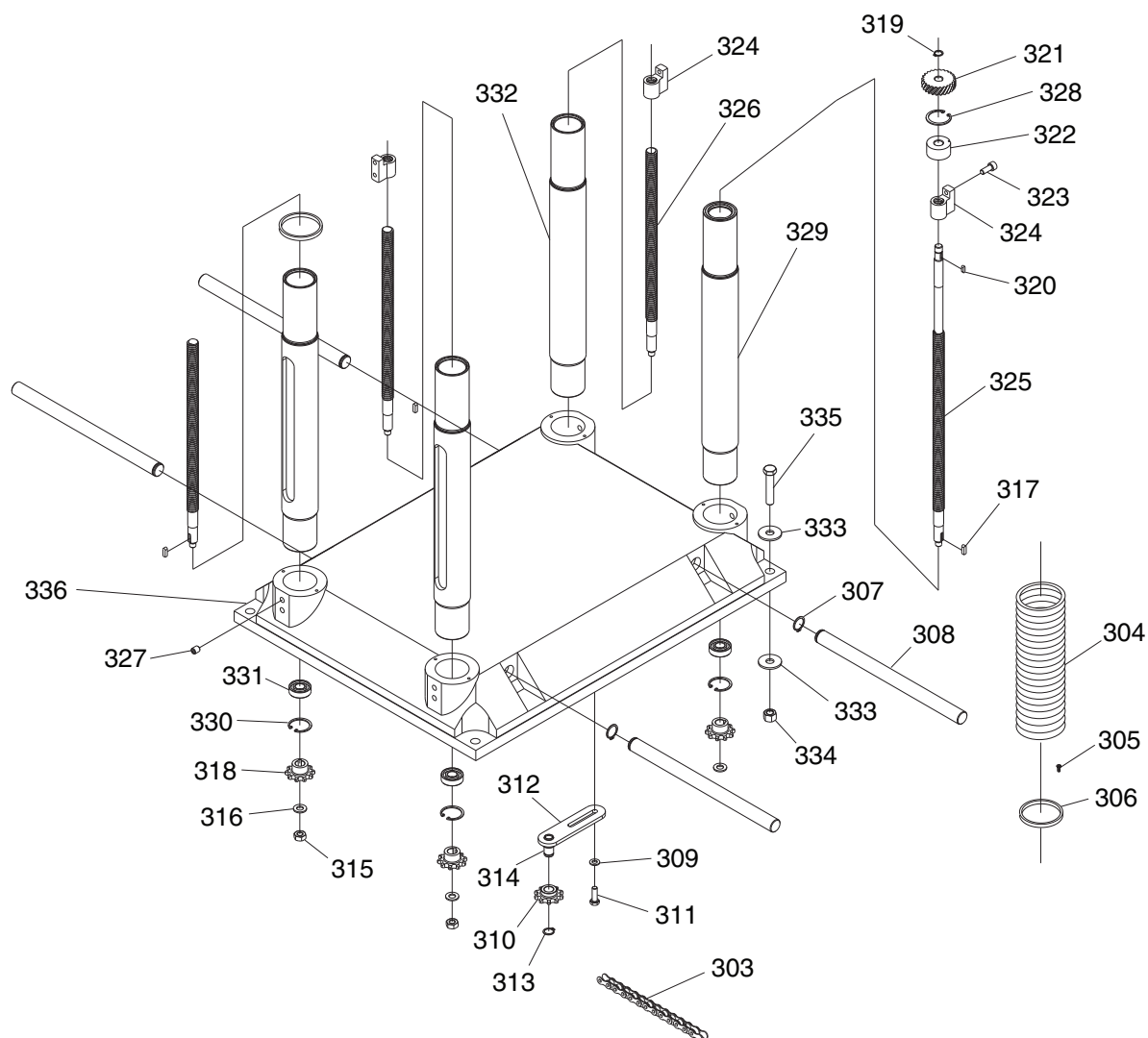


REF	PART #	DESCRIPTION
201	PB20M	HEX BOLT M8-1.25 X 35
202	PW01M	FLAT WASHER 8MM
203	PLW04M	LOCK WASHER 8MM
204	P0454204	EXTENSION WING
205	P0453208	STAR KNOB M12-1.75
206	P0454206	LOCKING ROD
207	P0454207	GIB

REF	PART #	DESCRIPTION
208	P0454208	WEDGE DOG
209	PSS04M	SET SCREW M6-1 X 12
210	P0454210	ECCENTRIC SHAFT
211	P6201	BALL BEARING 6201ZZ
212	P0454212	BED ROLLER
213	P0454213	MAIN TABLE
214	PSS09M	SET SCREW M8-1.25 X 20



G0454 Columns Breakdown

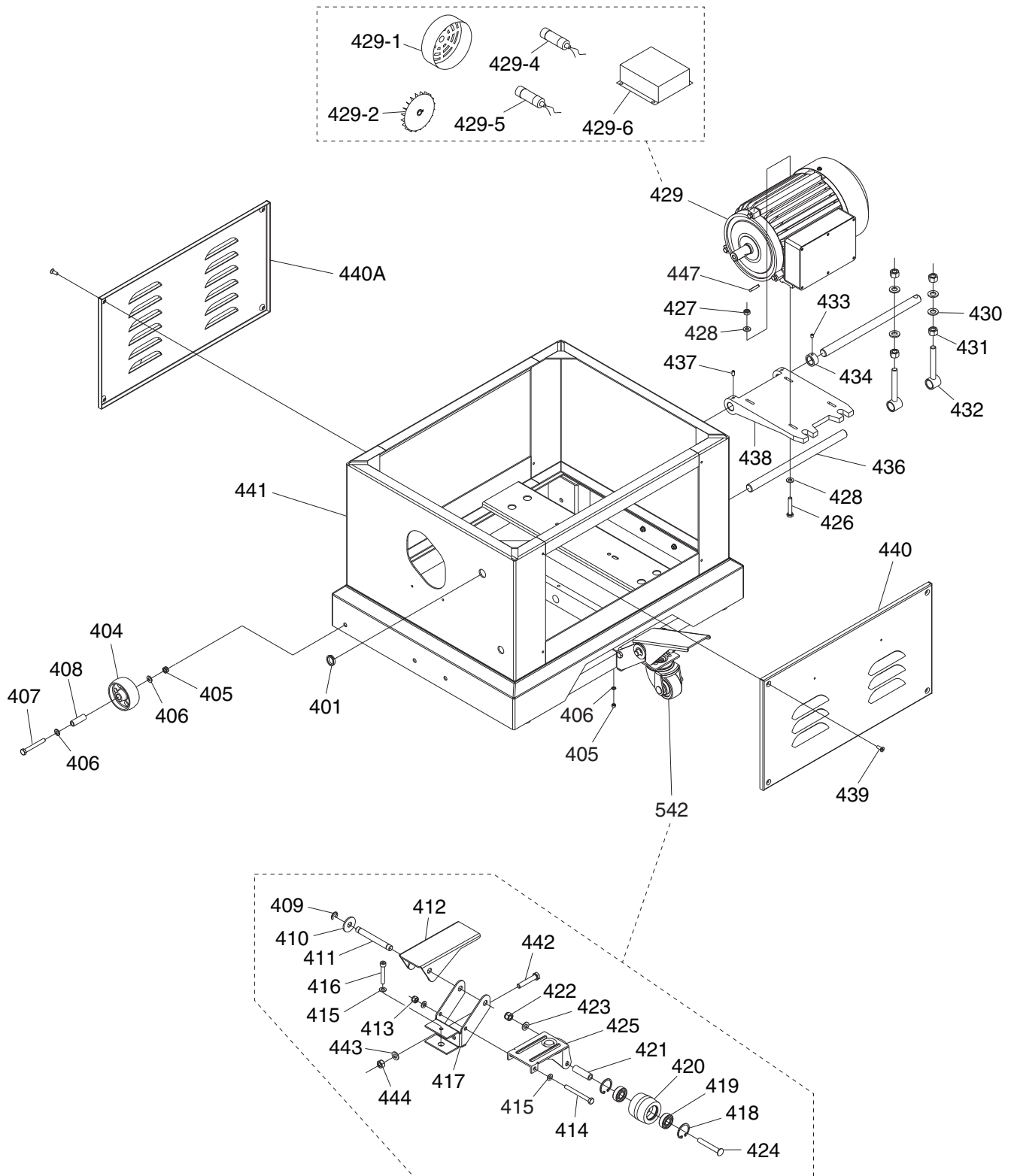


REF	PART #	DESCRIPTION
303	P0454303	CHAIN 08A-1 X 66
304	P0454304	DUST BOOT
305	PS09M	PHLP HD SCR M5-.8 X 10
306	P0454306	DUST BOOT RETAINER
307	PR73M	EXT RETAINING RING 5MM
308	P0454308	LIFTING BAR
309	PW01M	FLAT WASHER 8MM
310	P0454310	SPROCKET
311	PB07M	HEX BOLT M8-1.25 X 25
312	P0454312	BRACKET
313	PR05M	EXT RETAINING RING 15MM
314	P0454314	SHAFT
315	PN02M	HEX NUT M10-1.5
316	PW04M	FLAT WASHER 10MM
317	PK08M	KEY 5 X 5 X 16
318	P0454318	SPROCKET
319	PR03M	EXT RETAINING RING 12MM

REF	PART #	DESCRIPTION
320	PK69M	KEY 4 X 4 X 12
321	P0453318	GEAR
322	P0454322	BUSHING
323	PSB14M	CAP SCREW M8-1.25 X 20
324	P0454324	LEADSCREW NUT
325	P0454325	PRIMARY LEADSCREW
326	P0454326	SECONDARY LEADSCREW
327	PSS13M	SET SCREW M10-1.5 X 12
328	PR22M	INT RETAINING RING 38MM
329	P0454329	PRIMARY COLUMN
330	PR21M	INT RETAINING RING 35MM
331	P6202	BALL BEARING 6202ZZ
332	P0454332	SECONDARY COLUMN
333	PW06M	FLAT WASHER 12MM
334	PN09M	HEX NUT M12-1.75
335	PB38M	HEX BOLT M12-1.75 X 60
336	P0454336	BASE



G0454 Cabinet Stand Breakdown



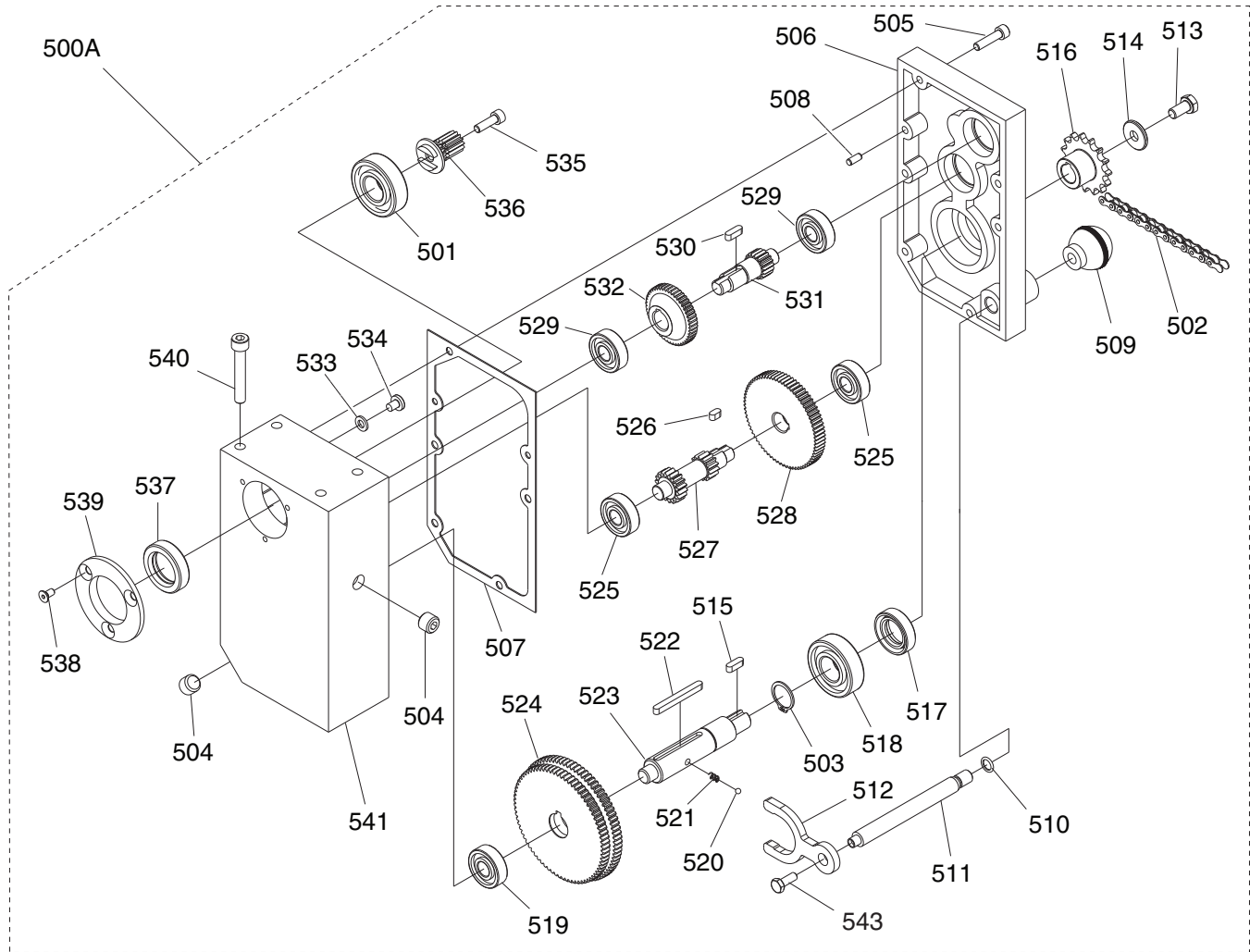
G0454 Cabinet Stand Parts List

REF	PART #	DESCRIPTION
401	P0453402	RELIEF BUSHING
404	P0453405	UNIVERSAL WHEEL
405	PN03M	HEX NUT M8-1.25
406	PW01M	FLAT WASHER 8MM
407	PB86M	HEX BOLT M8-1.25 X 65
408	P0453409	BUSHING
409	PR16M	EXT RETAINING RING 9MM
410	PW06M	FLAT WASHER 12MM
411	P0453412	SHAFT 12MM
412	P0453413	PEDAL
413	PN03M	HEX NUT M8-1.25
414	PB45M	HEX BOLT M8-1.25 X 100
415	PW01M	FLAT WASHER 8MM
416	PB166M	HEX BOLT M8-1.25 X 50
417	P0453418	BRACKET
418	PR21M	INT RETAINING RING 35MM
419	P6202-2RS	BALL BEARING 6202 2RS
420	P0453421	TROLLEY WHEEL
421	P0453422	SLEEVE
422	PLN09M	LOCK NUT M12-1.75
423	PW06M	FLAT WASHER 12MM
424	P0453425	SPECIAL BOLT
425	P0453426	TROLLEY UNIVERSAL KIT
426	PB118M	HEX BOLT M8-1.25 X 45
427	PN03M	HEX NUT M8-1.25

REF	PART #	DESCRIPTION
428	PW01M	FLAT WASHER 8MM
429	P0454429	MOTOR 5HP 220V 1PH
429-1	P0454429-1	MOTOR FAN COVER
429-2	P0454429-2	MOTOR FAN
429-4	P0454429-4	S CAPACITOR 300M 250V
429-5	P0454429-5	R CAPACITOR 60M 400V
429-6	P0454429-6	MOTOR WIRING JUNCTION BOX
430	PW06M	FLAT WASHER 12MM
431	PN09M	HEX NUT M12-1.75
432	P0453433	ADJUST BOLT
433	PSS03M	SET SCREW M6-1 X 8
434	P0453435	COLLAR
436	P0454436	PLATE CONNECTING ROD
437	PSS04M	SET SCREW M6-1 X 12
438	P0454438	MOTOR PLATE
439	PFH06M	FLAT HD SCR M6-1 X 20
440	P0454440	FRONT COVER
440A	P0454440A	REAR COVER
441	P0454441	CABINET STAND
442	PB143M	HEX BOLT M12-1.75 X 120
443	PW04M	FLAT WASHER 10MM
444	PN02M	HEX NUT M10-1.5
447	PK12M	KEY 5 X 5 X 30
542	P0454542	FOOT PEDAL ASSEMBLY



G0454 Gearbox Breakdown

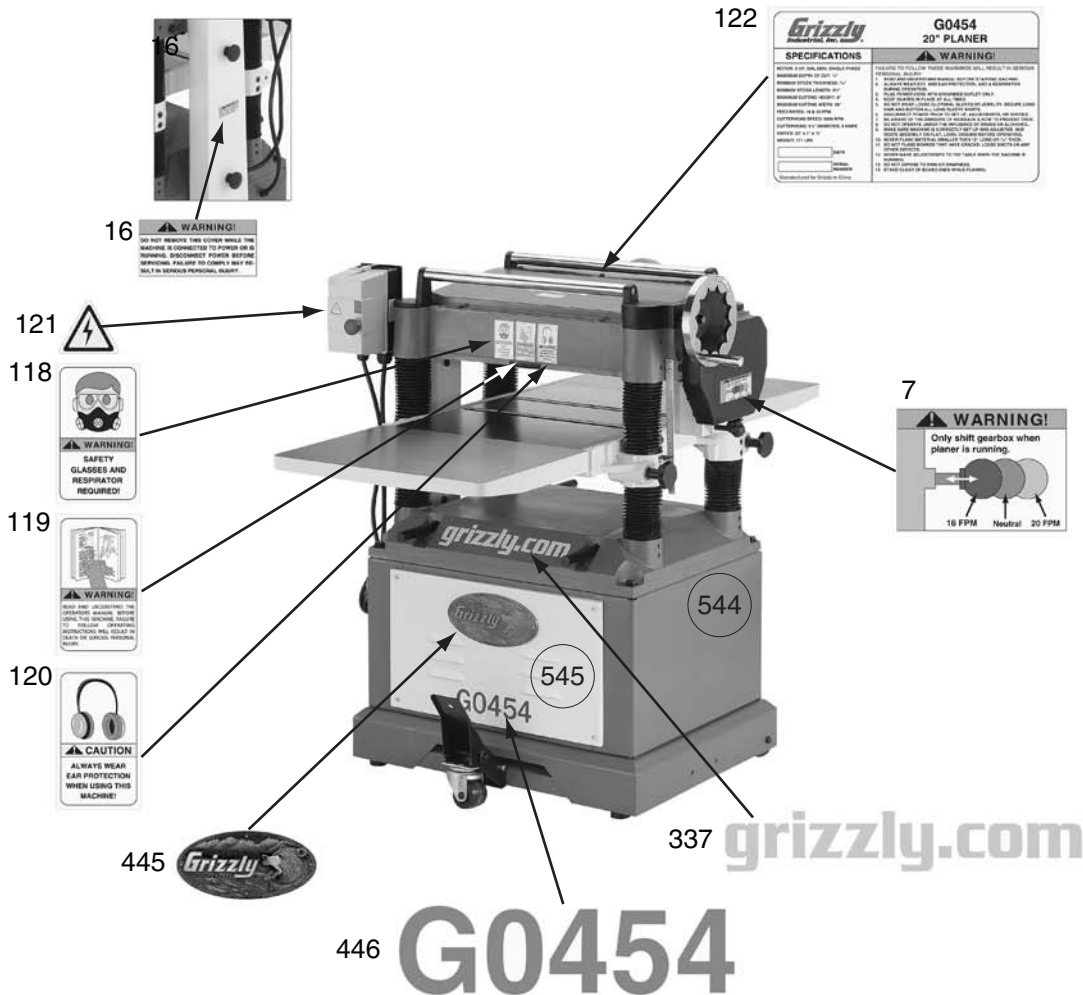


REF	PART #	DESCRIPTION
500A	P0454500A	GEARBOX ASSEMBLY
501	P6204	BALL BEARING 6204ZZ
502	P0454502	CHAIN 06B-1 X 51
503	PR09M	EXT RETAINING RING 20MM
504	P0453503	OIL PLUG
505	PSB06M	CAP SCREW M6-1 X 25
506	P0453505	GEARBOX BASE
507	P0453506	GASKET
508	P0453507	PIN 5 X 10
509	P0453508	BALL KNOB M10-1.5
510	PORP016	O-RING 15.8 X 2.4 P16
511	P0453510	HANDLE SHAFT
512	P0453511	SHIFTING FORK
513	PB03M	HEX BOLT M8-1.25 X 16
514	PW01M	FLAT WASHER 8MM
515	PK08M	KEY 5 X 5 X 16
516	P0454516	SPROCKET
517	P0453516	OIL SEAL 20 X 35 X 7
518	P6204	BALL BEARING 6204ZZ
519	P6201	BALL BEARING 6201ZZ
520	P0453519	STEEL BALL 4MM
521	P0453520	COMPRESSION SPRING

REF	PART #	DESCRIPTION
522	PK36M	KEY 5 X 5 X 50
523	P0453522	SHAFT
524	P0454524	GEAR
525	P6201	BALL BEARING 6201ZZ
526	PK06M	KEY 5 X 5 X 10
527	P0454527	GEAR SHAFT
528	P0453527	GEAR
529	P6201	BALL BEARING 6201ZZ
530	PK19M	KEY 5 X 5 X 14
531	P0453530	GEAR SHAFT
532	P0453531	GEAR
533	PW03M	FLAT WASHER 6MM
534	PS03M	PHLP HD SCR M6-1 X 8
535	PSS25M	SET SCREW M6-1 X 20
536	P0453535	GEAR 14T
537	P0453536	OIL SEAL 25 X 40 X 10
538	PSB33M	CAP SCREW M5-.8 X 12
539	P0454539	FLANGE COVER
540	PSB05M	CAP SCREW M8-1.25 X 50
541	P0454541	GEARBOX COVER
543	PFB01M	FLANGE BOLT M6-1 X 12



G0454 Label Placement



REF	PART #	DESCRIPTION
7	P0454007	SPEED CHANGE LABEL
16	P0453019	BELT COVER LABEL
118	PLABEL-37	RESPIRATOR/GLASSES LABEL VL
119	PLABEL-12	READ MANUAL LABEL VL
120	PLABEL-36	EAR PROTECTION LABEL VL
121	PLABEL-14	ELECTRICITY LABEL

REF	PART #	DESCRIPTION
122	P0454122	MACHINE ID LABEL
337	P0454337	GRIZZLY.COM LABEL
445	G8588	GRIZZLY NAMEPLATE
446	P0454446	MODEL NUMBER LABEL
544	PPAINT-1	GRIZZLY GREEN TOUCH UP PAINT
545	PPAINT-11	GRIZZLY PUTTY TOUCH UP PAINT

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.







WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

_____ Advertisement

_____ Friend

_____ Catalog

_____ Card Deck

_____ Website

_____ Other:

2. Which of the following magazines do you subscribe to?

_____ Cabinetmaker & FDM

_____ Popular Science

_____ Wooden Boat

_____ Family Handyman

_____ Popular Woodworking

_____ Woodshop News

_____ Hand Loader

_____ Precision Shooter

_____ Woodsmith

_____ Handy

_____ Projects in Metal

_____ Woodwork

_____ Home Shop Machinist

_____ RC Modeler

_____ Woodworker West

_____ Journal of Light Cont.

_____ Rifle

_____ Woodworker's Journal

_____ Live Steam

_____ Shop Notes

_____ Other:

_____ Model Airplane News

_____ Shotgun News

_____ Old House Journal

_____ Today's Homeowner

_____ Popular Mechanics

_____ Wood

3. What is your annual household income?

_____ \$20,000-\$29,000

_____ \$30,000-\$39,000

_____ \$40,000-\$49,000

_____ \$50,000-\$59,000

_____ \$60,000-\$69,000

_____ \$70,000+

4. What is your age group?

_____ 20-29

_____ 30-39

_____ 40-49

_____ 50-59

_____ 60-69

_____ 70+

5. How long have you been a woodworker/metalworker?

_____ 0-2 Years

_____ 2-8 Years

_____ 8-20 Years

_____ 20+ Years

6. How many of your machines or tools are Grizzly?

_____ 0-2

_____ 3-5

_____ 6-9

_____ 10+

7. Do you think your machine represents a good value?

_____ Yes

_____ No

8. Would you recommend Grizzly Industrial to a friend?

_____ Yes

_____ No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

Note: We never use names more than 3 times.

_____ Yes

_____ No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place
Stamp
Here



GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name_____

Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.



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~Since 1983~

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